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The Volunteer Review

AND MILITARY AND NAVAL GAZETTE.

A Journal Devoted to the Interests of the Military and Naval Forces of the Dominion of Canada

VOL. VII.

OTTAWA, (CANADA,) TUESDAY, FEBRUARY 25, 1873.

No 8.

NEWS OF THE WEEK.

The condition of Count Bernstorff, the German Ambassador to the Court of St. James, is unchanged.

It is reported that some of the Great Powers have intimated to the Spanish Government, that they will oppose the formation of a Federal Republic.

Austria will recognize the Republic of Spain, as soon as officially notified of its definite establishment.

The estimated expenditures for the army for the financial year of 1873 and 1874, form a total of \$66,157,000, which is a reduction of \$2,040,500 from those of the current year.

The explosion in the coal mine at Staffordshire, on Tuesday, caused the death of twenty miners, not fifty, as was reported. Their bodies have been recovered.

A report has been received here that Cafe, in Sizozon, situated on the shore of the Gulf, having been undermined by the tides, was suddenly swallowed up in the waves, and that between one and two hundred persons, mostly Greeks, were drowned.

His Lordship the Bishop of Clonfert and Rev. Mr. Quinn have been acquitted of the charge of using spiritual influence to intimidate voters in the Galway Parliamentary elections.

From Paris we learn that The Extreme Left of the Assembly have abandoned the idea of sending a congratulatory address to the Republic of Spain.

The Committee of Thirty have adopted the amendments proposed by Dufaure, which provides that before its dissolution, the National Assembly shall enact laws organizing and directing the transmission of Legislative and Executive powers, and creating a Second Chamber.

The decision was to-day rendered in the case of Prince Napoleon against ex-Minister Lafranc, for the former's illegal expulsion from France. The Court declared its incompetency to try the case and ordered the plaintiff to pay the costs.

Under the law for the punishment of intoxication recently passed by the Assembly, 122 drunkards have been arrested in Paris within the last 48 hours.

Spanish intelligence is as follows :

A corporal attached to a regiment stationed in Alcazar del San Juan, a town in New Castile, attempted to excite a mutiny amongst his fellow soldiers in favor of Don Carlos. The troops refused to take part in the movement and gave repeated cheers for the Republic. The corporal was arrested.

A meeting of the leading members of the conservative party was held today (19). Among those present were Topete, Santa Cruz, Rios Rosas and Ulloa. The meeting decided not to oppose the present Government, but to press for the dissolution of the Assembly, and the Convocation of a Constituent Cortes.

A Carlist band which occupied the forest of Villa Vella in Catalonia has been defeated and dispersed.

In the Assembly to-day the Prime Minister made a speech, in the course of which he defined the powers of the existing Legislature. He reminded members that the National Assembly was transitory and not constituent, and in its decrees and acts should strictly observe the Constitution.

General Cordova, Minister of War asked for supplies for arming the people, all available arms having been distributed.

The Republican prisoners set free by the amnesty arrived at Barcelona to-day from Port Mahon on a Government vessel. The piers and quays were lined with crowds of people, who enthusiastically cheered the men as they landed.

The Bill for political reforms and the abolition of slavery in Porto Rico is again under consideration in the National Assembly. An amendment was proposed providing that no indemnity shall be awarded for slaves brought into the island since the abolition of the slave trade.

Several vessels of the British squadron in the Mediterranean have been ordered to Lisbon. Portugal has been the most ancient ally of England in Europe, and it is feared an attempt would be made by the Spanish Republicans to create a revolution in that Kingdom. It has been always a

favorite theory of Spanish political philosophers that the Iberian Peninsula should be united under our government. It was so till after the death of Philip II., better known as the hero of the "Armada," a successful revolution of the native Portuguese placed the Duke of Braganza on the throne which his descendants occupy to the present day.

The school of young Spain have also another craze, and that is the wresting of Gibraltar from the hands of Great Britain.

Portugal is to have a corps of observation on her fortifications.

Among the measures which the Ministry of Spain will propose will be one for the separation of Church and State. It is also intended to suppress the Royal Guard, the Council of State, the Ministries of Colonies, Justice and Public Works, and to do away with pensions to officials under 60 years of age. As regards Cuba, it is intended to wait the arrival of deputies from that Island before entering upon measures of reform.

A special to the London *Telegraph* says the United States had offered to purchase Cuba for 125 millions sterling. It is also reported that the military governor of the island had declared his intention to obey whatever government was constituted in Spain.

The Asiatic question is still a source of anxiety and danger. The situation as far as England and Russia is concerned, is by no means satisfactory. One of the military journals says that the air is redolent of the smell of gunpowder. It is reported that the force to be employed against Khiva will be about 7,000 men. German influences are at work throughout the whole transaction, and English journals are not sparing in their comments on the action of that power. Altogether, the Whig Radicals have made a nice mess of it, as this state of affairs is the sequel of the cowardly stupidity which surrendered the Treaty of Paris in 1870.

Mr. Wagner, Emigration Agent for Ontario, in Alsace and Lorraine, has been arrested and sent out of the country by the Prussians.

NEW DRILL AND TACTICS.

(Continued from Page 74.)

"A division is to have two of its brigades in front, each formed as above, the third is to be in reserve, behind the centre, 500 or 600 yards in rear in line of battalion or half-battalion double columns. Though the centre is named as the position for the rear brigade, there is often one flank more liable to attack than another, and the divisional commander, free as he now is, will doubtless have his reserve near the flank likely to be attacked."

Our contemporary proceeds:—"A division formed in an open plain is to have a battery of artillery on each flank, with cavalry in echelon outside them. The rest of the cavalry and artillery to be on the flanks of the reserve brigade, behind the centre. 'When it is possible to bring the reserve artillery and cavalry into action, they can either come upon the flank or they can pass straight through the intervals between the half-battalion columns of the infantry line. While entirely rejoicing at the real progress in infantry tactics this order makes, we cannot but feel some astonishment at the ideas thus expressed on the place and work to be given to cavalry and field artillery, and it may fairly be asked, how did the infantry division get so comfortably established in its plain in order of battle? Did it win a way for itself under such circumstances that the cavalry and artillery are only now becoming up to see whether there is any room for them in the fight? Grateful as we are for so great a boon given to the army as this order is, it is impossible not to say that it fails to meet the usual form of modern battles, which occur by the meeting of two forces, one or both of them being on the march and having to begin the attack with whatever is in front at the time. Then the modern plan is to push on the artillery and let the infantry get into formation under cover of the guns. Indeed it is difficult to conceive any country in which infantry could form up so comfortably while a doubt existed as to the possibility of artillery action. It is common to talk of the great continental plains as so different for fighting purposes from the enclosures of England. But when we study the wars of modern times, we find that battles are not fought on such plains as a rule, but quite the contrary, in hilly districts or the environs of rich towns, where the land is cut up by streams; farms, walls, orchards, and villas with their exclusive gardens. The columns have first to march along the roads. They deploy with a world of difficulty—often, indeed, cannot deploy at all, but lay hold with the front of the columns, trusting to help there or diversions on the flank. The influence of Aldershot and the drill field seem to have hindered a full grasp of these truths, for we find nowhere throughout the whole order directions as to the march and method of engaging in battle from the march. It is doubtful whether any enemy would in these days permit of such quiet and orderly arrangements as those contemplated by the orders, which are applicable rather to the fashions of the past than the present. But perhaps we may yet look for a supplementary order treating that most important of military operations, the march and the attack from the march. Are the batteries to be near the front of the column as is the practice now on the continent, or are the infantry to be halted perpetually while the artillery is sent for? Some decision is wanted on these points before the next manoeuvres, which may be in a country

not so open as Salisbury Plain. The right idea was seized when the order was written, that artillery which has once found a good position should be seldom moved. It might have been well to add 'and when it is moved the pace should be the quickest possible,' for every moment the guns spend in moving is lost to their action against the enemy.

"Certain rules are laid down concerning changes of front, but as it is frankly stated afterwards that such changes of front 'through necessary for purposes of drill, would rarely be required on service,' we may ignore them, and only add that there are so many things to be learnt necessary for war purposes that perhaps for a time the changes of front necessary for drill purposes might be omitted, or at least passed over lightly. The bringing a column rapidly into action from the line of march is one of the things necessary for war purposes, and we earnestly hope it may have precedence over 'changes of front.' A brigade or division once formed up in the prescribed order will advance in war we are told, if there is any chance of a flank attack, keeping a brigade battalion in echelon on the exposed flank. In case of attack, such brigade or battalion will at once face the enemy, throwing out skirmishers and supports as if it were alone, while the reserve will be brought up to extend and support the threatened flank. We presume that section seven represented only a parade movement, because it involves just such movements as those previously stated to be unlikely to occur in war, while it adds artillery and cavalry to the troops changing one position and occupying another, clearly only for drill purposes. As such we can only say of it that until we have got good hold of all movements necessary for war, it might be well to rest content without that intensity of labour at parade movements which they receive from persons who consider drill as an end in itself, and not a means towards efficiency in war.

"The section on 'the conduct of the attack of a division in the new formation' is incomplete in itself without the last paragraph in the section on 'the Cavalry and Artillery of a Division,' wherein it is laid down that 'the advance of infantry should always be preceded by a concentrated fire of artillery on the point selected for attack.' This is quite different from the order that guns should be so placed as to be able from a distance to bring a concentrated fire on the point where the attack is being made. The Prussian order issued in the midst of the war, after experience gained, was to the effect that no general was, at his peril, to make an attack with infantry till it had been well prepared by artillery. The impossibility of successful front attack upon an enemy not yet demoralised hardly seem to have taken root yet in the minds of English officers, and it is even proposed to march half-battalions in line over skirmishers who are checked, and thus gain the enemy's position. That the half-battalions will move up in war we firmly believe, but not that they will attack in unbroken line, as seem to be supposed. It may be taken as established that lines cannot go where skirmishers cannot, and that lines pushed closely in must and will have a tendency to dissolve themselves in a very good imitation of the skirmishers they were sent to help. Such is the opinion of all who have actually been present at modern battles, and we strongly recommend those who are still doubtful just to stand for half a minute under fire of a few breech-loaders. We can vouch for it they will find the effect quite as great as they anticipated.

"The attack is to commence with a gen-

eral advance, preceded of course by artillery fire. When the skirmishers are checked they will be reinforced by the supports; if the ground allows, the supports may even fire over the heads of the skirmishers. The effect in real war would be that the enemy, delighted at having so good a target, would inevitably fire with guns and small arms at the supports; but all that will right itself in time. If skirmishers and supports cannot get on, the line itself is to come into action, passing over the skirmishers, and to make a front attack if there appears to be any chance of success. Otherwise the skirmishing line will try to hold its own, while some of the half battalions behind try to gain the enemy's flank, a corresponding number of troops being brought from the reserve to reinforce the weakened part of the line. It is supposed that there will usually be a combination of front and flank attack. Guns may fire if necessary over the head of the infantry, and small bodies of cavalry may be used to make rushes upon the enemy's skirmishers, causing them to run into rallying squares and form a mark for their opponents. Such attacks are not to be followed up, being evidently intended to partake of the nature of feints." Our contemporary justly observes in conclusion:—"This is all, but it is all important. Once allow freedom of initiative to officers, requiring them to give a good account of the trust reposed in them and there must be a steady progress. Everybody will read and think and learn as only those can who read and think. The battles of late wars and the ideas derived from them by the actors will be familiar to Englishmen almost as if they had been present. Their minds will move in the same direction as those of the Germans, French, and other continental nations are moving now, and the few steps yet untaken will be achieved. But we urge once more the absolute necessity of small manoeuvres throughout the year, to practice both junior officers and men. Nothing can be more interesting, or a better variation to the monotony of garrison life. Wherever instituted they become popular; they teach more than any great manoeuvres, at least to those engaged in them, not to Generals and Staff. They cost nothing, and above all, they give a feeling of modesty worth acquiring, for it is only by trial that men find how little they know and how much there is to learn."

The proceedings of the Japanese authorities towards the captain of the Peruvian ship *Maria Leiz* are likely to lead to serious differences between the two countries. The ironclad *Independencia* to be followed by the corvette *Union*, are ordered to proceed to the China seas. Signor Garcia goes in the *Independencia*, armed with full powers to demand an explanation.

BREAKFAST.—EPPS'S COCOA.—GRATEFUL AND COMFORTING.—The very agreeable character of this preparation has rendered it a general favorite. The *Civil Service Gazette* remarks:—"The singular success which Mr Epps attained by his homoeopathic preparation of cocoa has never been surpassed by any experimentalist. By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition and by a careful application of the fine properties of well-selected cocoa, Mr. Epps has provided our breakfast tables with a delicately flavoured beverage which may save us many heavy doctors' bills." Made simply with boiling water or milk. Sold by the Trade only in 1lb., ½lb., and 1lb. tin-lined packets, labelled—JAMES EPPS & Co., Homoeopathic Chemists, London, England.

ON THE BEST DETAIL FORMATION FOR
THE NEW INFANTRY TACTICS.

BY J. H. A. MACDONALD,

Lieutenant Colonel Queen's Lancers, &c. R. 17.
Brigade.

(Continued from Page 76.)

As our system of Infantry tactics has up to the present time been so extremely mathematical in its character, and as it is evident that we are on the eve of a tactical revolution, there is need to keep in view two things; first, when a revolution is imminent there is no risk of ill considered modes of carrying out changes that are advisable in principle being adopted; and second, that the effect of a revolution in which such errors occur is generally to produce an equally indiscreet restoration. I say this, because, from all one hears and reads about "the Prussian system," it would appear as if many were falling down and worshipping the German tactics of 1870-71, with the excitement and blind zeal of devotees, instead of examining them dispassionately with a critical eye, and improving upon them if possible. The success of the Germans does not prove that their tactics were perfect in detail, it only proves that they were based on good general principles; and the circumstances in which they were developed make it most unlikely that they were completely matured and perfected. For they were introduced after the war had begun, when it was found that the old mode of fighting would not do, and therefore they were adopted in the very heat of the struggle, when it is not easy to elaborate a system, and when, if the system taken up, however crude it might be, was found to serve the purpose at the time, most probably it would be adhered to, as it was; for no General who found his system doing his work efficiently in actual war would be likely to try experimental operations in presence of the enemy. Besides all this, there was no true opportunity of testing how the system would work in detail in the event of disaster. It would be much more easy to accept the new German tactics wholesale, had we had an opportunity of seeing how they worked in the case of an army obliged to retire under defeat. Had the French been successful in a few important engagements, it would then have been known practically how the Prussian system was suited to produce an orderly and well executed retreat. Tactics are as much, if not more needed to prevent disaster becoming destruction, than to make success triumphant. Therefore there is need to be cautious how we adopt entire principle and detail together, a system, the character of which is so novel that one hears it talked of as "swarms of skirmishers," "systematic disorder," "organised disorder," &c. &c. It is quite evident, that just in proportion as the principles of the new system necessitate *disarrangement*—I use this expression as a more correct one than *disorder*—so is it essential that the greatest care should be taken to adjust the tactical component parts of an army, in order as much as possible to prevent disarrangement leading to disorder in the true sense. And in order to do this it is necessary to endeavor to find out; not so much what is the best system, looking to the peculiarities of the country, the nation, and the army. National characteristics must be considered. A system which may be the best for an army raised by conscription may not be so suitable for one raised by

voluntary enlistment. A system adapted to an army the regiments of which are not much moved about from place to place, may be most unsatisfactory when applied to an army the regiments of which are constantly being moved. Any peculiarity in the mode of officering a force may be an important element in fixing the detail part of its tactics. And lastly, as the primary duty of an army in the defence of the country to which it belongs, the tactical detail of its system of manœuvring should be that best suited to the peculiarities of the country, whether those be natural, or the result of the mode of laying out and fencing adopted by the inhabitants.

It is most earnestly to be hoped that the compilers of the next "Field Exercise" will not adopt anything from the Prussian system merely because that system was in the main successful, and this for two reasons. First, because it is undoubtedly crude, and not tested in a very crucial manner, as the French only fought against it when to a great extent they were already demoralized; and second, because the detail part of tactics ought to vary in accordance with national peculiarities and local specialities. This does not mean that the details are to be fixed on merely because the most suitable for the particular country; but it may often happen that there are two ways in which a matter of detail may be done, both of which would be held equally good when considered as to their suitability for general service, but of which one might be vastly superior for purposes of national defence, looking to the peculiarities of a country and its people. In such a case there could be no question as to which it would be advisable to adopt. And therefore I say again, it is most earnestly to be hoped, that while the tactical principles which have proved themselves good are followed, all matters of detail should be separately and carefully considered, and none should be adopted except such as, being suited for modern warfare generally, are, at the same time, the best suited to our special national circumstances.

I shall now state briefly what are the general principles, as it humbly appears to me, upon which our infantry tactics ought to be based, in consequence of the altered conditions resulting from the increased precision and range of fire arms. After the principles have been laid down, the mode by which it is proposed to work them out in detail will be stated. In the first place, I would suggest, as a fundamental principle never to be departed from, that the company should be a complete skirmishing body in itself—skirmishers, support and reserve. (1) Under the old system, which is to be superseded, in which skirmishing was only preliminary to battle, and not a substantial part the battle itself, there might be no harm in scattering a whole company into a long line which often covered several hundred yards of ground. They were not intended to stay out for protracted fighting. But such

* Since this was written, I have seen in Colonel Gawler's latest work the following:—"The War caught the Germans in their columns, and they got some startling lessons. It was too late to practise the line, or to get their skirmishers better in hand, so, with admirable good sense, they adopted the skirmishers swarm. The success of the loose and very extended formations adopted by the Germans, was certainly owing to the demoralization of the French, and the raw levies which had filled up the gaps in their ill-provided army."

(2) Since the above was written I have seen the same idea strongly urged in an article in the *Standard*, which confirms me in the opinion, as the military articles of that paper are undoubtedly among the very best that appear, and are evidently the work of a good master of the art of war.

a plan is obviously unsuitable, if the "swarm of skirmishers" is to be, or even may be, the fighting form of the actual and decisive engagement. It is evident that there is no way in which a company could be arranged which would more prevent it being under control of its captain, than to spread it all out into a long thin line, and engage the whole of it at once with the enemy. If he is really to be, as he ought to be, the controlling spirit of his company when fighting, he would need most herculean bodily powers to enable him to run about so as to see how his long thin line was working, whenever they left flat and open ground, that being the very time when his control is most needed. (m) And however active he might be, he could never accomplish the feat of being in two places at one and the same time. A slight undulation, or a clump of trees, may shut out half his command from view, and while he is looking after his widely scattered brood, the other half may get astray all together. This was often illustrated during the late Autumn Manœuvres, although they were fought in an exceptionally open country, the long line of one company in skirmishing order often got quite out of control of its captain, in consequence of the nature of the ground, and sometimes a great part of it disappeared altogether from his view and was lost to him during the rest of the fight. And often, from the same cause, the line of skirmishers being so long, the connection between supports and large portions of the skirmishers were totally lost.

(m) I believe that in the Kaffir war, in which most of the fighting was in extended order, captains of companies suffered terribly from the over exertion caused by their having to look after a whole company extended, and often they could not do it at all.

[To be Continued.]

IS ENGLAND "EFFACED"?

Events change so rapidly that deliberate judgments are reversed by the logic of facts, and questions fools put but wise men cannot answer are seen to be silly and puerile in the light of subsequent disclosures. We are all victimised by opinions and predilections, and when we are most vigorous in assertion we are frequently less than ever in possession of the truth. Take two examples. Russia has just published some papers bearing on the secret history of the Crimean war. They show a singular delusion as to the enmity of France and the friendship of England. What Russia feared most was not Great Britain, but the Second Empire. Prince Menschikoff assumed "a certain identity of views" between Russia and England. He was never more mistaken in his life, as events have proved. Lord Aberdeen drifted into war, and the English nation was roused in condemnation of his imbecile administration. It meant to fight and beat Russia, and it succeeded. The second example is more modern. Two years ago certain impudent critics gabbled about "the effacement of England." They found believers, as even constructors of mermadies will, amongst English speaking peoples. Germany had crushed France, and wrested from her the two brave provinces whence she drew her best soldiers. England stood by, consenting to the spoil, fearful of the Teuton, dreading the Junkers, loving only her money bags and cotton bales. Since then the *Atadama* and the San Juan awards have gone against us. Are we one whit the worse? Our critics are silenced. They had a taste of English feeling when the indirect claims

were under discussion. They even blamed the English Premier for his warmth. A few also blamed him for concentrating so many troops at home. Foreign critics have echoed their own words. A German semi-official organ has made light of England's strength and security. What has been the answer? One of scorn and semi-defiance. Germany is answered that even without allies we can hold our own, and endure a long and serious war, with every prospect of success. Pulling sentimentalists have evoked the answer to their own cowardly taunts. We have been driven to take stock of our resources, and we issue from the process without weakness and without dismay.

Again Russia has tried to play upon the old string of "identity of views," this time not about Turkey, but about Central Asia. She professes to be satisfied with her researches. Count Schouvaloff has been purring at every court on his way home. But we find no purring in Russia. When journalists are forbidden to discuss, there is usually something unpleasant to reveal. The Count came under colour of negotiating a Royal marriage; he retires under colour of having exchanged views respecting the universal bugbear—the International. We happen to be better informed than to believe all we hear from St. Petersburg. Matters have very materially changed since November, 1870, when Russia withdrew from the Black Sea Treaty. We are by no means effaced. The rules that made judgment go against us at Geneva are now binding upon the United States. The *Adamas* of the Hudson are no longer feared. The Navy of the United States, as we have disclosed in these columns, is in a state of rotten inefficiency. Seen afar off, through the intervening horizon haze, raised by Mr. Reed, *Peter the Great* looked a monster. It is no longer a terror, either to John Bull couchant or John Bull rampant. England is in a position to make her influence felt. Russia tries it on, and "identity of views" is not so apparent, though again professed. Earl Granville is a being very unlike Lord Aberdeen, in whose "moderation and good sense" Prince Menschikoff so firmly believed. Mr. Gladstone is not a fighting Premier, but he has shown that he knows how and when to put his foot down, and he does not rate England's Empire in India so lightly that he can allow it to be imperilled out of "consideration" for imprisoned Russian traders.

Unless Count Schouvaloff be the veriest diplomatic dolt in existence, he must have felt the pulse of England during his short stay in this country. It has been beating firmly and steadily all the time he was here, without intermission and without cessation. The absence of the "moderation" expected is now lamented by the *Official Gazette* of St. Petersburg. The demon is raised, and cannot be so readily laid, even with bell, book, and candle. Peace partisans find it difficult to resist the tide. Arbitrationists would hardly consent to refer the question of the frontier of Afghanistan to any court or arbitrator. Fighting for "a sick man" and fighting for the security of our Indian Empire, are seen to be wholly different things by the most obtuse and doltish. No matter how we have acquired our Indian possessions, they are in our keeping, and we cannot consent to part with them, or to expose them to the cunning of Russian intriguers.

Few persons are so sanguine as to believe in the absolute sincerity of Russia's intention to stop short of the actual conquest of Khiva. If not now, at some other time the proper excuse will be made. She might have arrested her course in 1864, when she

had mastered the Kokands, occupying Doulette, Turkestan, and Chomkond. But in the following year Tashkend was attacked, lest it should fall into the hands of Bokaria. The capture of Samarcand succeeded. Since then Khiva itself has been threatened only to escape for a time. Russia's real intentions get more apparent. She wishes to make her frontier contentious with our own, for purposes we may easily guess. Heavy embargoes have already been laid upon our commerce in the newly-acquired regions. The Khanates are practically closed to us. Shrewd observers have not expected any thing else. Her ulterior object is to weaken our hold upon India, and to play upon our weakness so as to produce "identity of views" upon European questions, and reach Constantinople in the rear. It is of no use mincing matters. Russia, no doubt, would like India well enough, if she could get it, and the possibility of getting it does not seem so difficult to her as to us.

But we should relish nothing better than a defensive war against Russia. We could meet her in India perhaps better than we did in the Crimea. Events have changed somewhat since the Central Asian question was last stirred to its depths. Afghanistan has not been annexed, as recommended by the Russophobists of Calcutta, but the next best thing has been done. The Ameer has been made our ally. Lord Lawrence laid that little matter in proper order before he left India, and Lord Mayo settled the business. Lord Northbrook has so far continued the right policy that he refused to be drawn into a premature entanglement by promising the requested assistance to the Khan of Khiva. The native races of India would like a little fighting. Sikhs leave the Army in disgust because there is nothing to do. The Abyssinian campaign has restored our prestige. Russia has never yet had more than 4000 troops in the field in Central Asia, and we could place six times that number on the Afghan frontier before the Oxus had been crossed. Mr. Cardwell's home concentration would prove useful in a new sense, and war would settle matters for a few generations. Russia knows all this very well, and hence she draws in like the touched leaf of a sensitive plant. She has no notion of provoking us in this direct manner, and there is accordingly all the more need for firmness and circumspection on our part. We believe they are both being exercised, and in a way to bear substantial and permanent fruit. Events will speedily show whether we are mistaken or not.

Quite independently, however, of any precise definition of the decision arrived at—a work of some difficulty at present—it is noticeable that we have "peaked up" in a manner most surprising to some sentimentalists. Dr. Arminius Vambéry, who cannot justly be so styled, rejoices in our awakening. He is pleased to behold the fruit of his own labours. Others might justly be as proud at the defeat of their own vaticinations. The removal of the American difficulty has really cleared the political air like a thunder-storm. We see and breathe more clearly. The panic of 1870 has passed away. Germany may boast, but we do not fear her. She has yet to square accounts with France and she is just as much interested in curbing Russia as we are; if anything, rather more so, because Russia is a neighbour, and might become an enemy, either by alliance with France or Austria. In our own way, we are preparing for any emergency that may arrive. Our Army will presently be more efficient than it has ever been in the whole course of our history—better armed,

better drilled, better trained. Our Navy, in spite of much to complain of, is without a rival, and it grows every year. The spirit of the people is unbroken by reverses, unflamed by successes. Whatever non-interventionists may say and do, they find it hard to induce the people to kotow to any foreign authority. If we succumbed in 1870, it was because we had ceased to rely on a mere paper guarantee. Let Russia repeat the experiments that preceded the Crimean War, and she will understand the meaning of our non-effacement. Our material resources are abundant. What little discontent we have at home is not national but local. The heart is sound. Our very reserve as a first rate Power renders us all the more potent when we speak out, and there has been some round and plain speaking during the last few weeks. With a good cause Great Britain would be as strong and as valiant as ever; and those who imagine that because we do not ask people to tread on the tail of our coat we have no fighting left in us, commit as great a mistake as if they were to interpret a moral epilepsy to be moral strength and fire-breathing to be fierce genuine valor.—*Broad Arrow*

THE BRITISH NAVY.

In the last fifteen years we find that there has been spent in erecting what was expected to be really efficient Navy, the enormous sum of between £30,000,000 and £40,000,000, and with what result? Simply that we find ourselves now in almost the same state of transition as regards the form or construction of the ship as when in 1861 the *Warrior*, steamed proudly down the Thames. The increasing power of artillery was the primary cause of the revolution in the construction of war-ships. For when Russia, in that terrible and successful attack on the Turkish fleet at Sinope, proved the penetrative and destructive effect of the then modern artillery the problem was at once created as to how far a ship could be constructed capable of resisting not only the penetrating shot, but also the still more terrible shell. And from that day to this, first the ship, then the gun has gained the upper hand. In those days the 68 pounder caused most disastrous results. Now it is the 35 ton 700 pounder gun that sends its mighty messenger of destruction, not simply through the unresisting side of the old three-decker, but penetrating the armour of the very finest specimens of naval modern architecture. For instance, the guns of the *Devastation*, can pierce the sides of the *Hercules* at a distance of over 2000 yards.

We are led to return again to this most vital question of our naval supremacy owing to a very able article having lately appeared in the present number of the *Quarterly Review*. And we conceive, as we peruse the article in question, that it is one likely to attract considerable attention, for the simple reason that it supplies such an array of facts that carry the greatest weight; and though we might reasonably wish for more information still the remarks we refer to are worthy of special attention.

The simple "battle of the guns" is not one the article in question wishes particularly to consider. And yet we may be pardoned the remark when we assert that the gun, being the very arbiter of war, our Navy can never be satisfactorily reconstructed until its true effect is considered.

Our naval supremacy is the ground of comparison the *Quarterly Review* takes up, and in comparing foreign navies with our

own is the one point it wishes to consider. The question should be, not, "What might we do?" but, "What are other nations doing?" In other words, that which Russia or Prussia can do, may surely be equalled, if not surpassed by the nation that has been as it were, the very cradle of the modern ironclad. Unfortunately, carrying out this policy of seeing what other nations are doing we commit ourselves to the almost fatal policy of *want of origination*. Not that we lack talent in our land, but simply that we need that discernment to decide independently as to what is brought under our notice to meet a felt need. It may be we are led to feel over complacent by the confident tones of a well-satisfied Ministry, and are only aroused by the rude shock to our national pride, on finding we have been surpassed in the race. Panic, haste, and wasteful expenditure follow, only to give place to the old spirit of apathy of the phlegmatic Briton. So long ago as 1869, the then Chief Constructor of the Navy designed ships to carry fifteen inches of armour and eighteen inches on turrets, indeed outline drawings were made, showing the facility with which even twenty inches of armour could be used. And yet after years we have only succeeded in reaching sixteen inches, and we have the supreme satisfaction of finding that on producing the *Devastation*, her duplicate appears on the waters of the Navy. It is but a days since we brought before our readers the design of a ship not carrying twenty inches, but three feet of armour, and it is with much satisfaction that the effect has been to excite the attention of the Admiralty to the plan then proposed, and certain inquiries are in progress. Unfortunately, hitherto the Admiralty's rate of progress as regards the thickness of armour is one inch per annum, which, unless materially modified, will seriously interfere with the acceptance of any design that shall involve the use of a three-foot thickness of armour for the ironclad of the future.

Again, returning to the question of guns. The *Devastation's* guns are matched in calibre by those of *Peter the Great*. We have reason to be proud of the "Woolwich Infant;" still we should not treat it as if it were an only child. Already we hear of the *Téméraire* having guns of 50 tons. And yet we are told that the *Superb*, just laid down, is to have nothing heavier than the "Infant," to be supplemented by eight 18 ton guns. All we can remark is, we sincerely trust this assertion will have a speedy and practical contradiction. The *Quarterly Review* to use an old proverb, hits the right nail on the head" when it plainly states that the country is ill served by our naval administrators. The naval material is not what it ought to be; its *personnel* is dissatisfied and discouraged." The high value of "our magnificent ironclad ships" is admitted by the writer: but he nevertheless complains that "while our motto should ever be "Onwards," fatal irresolution, feebleness, and waste have marked our course of action for the last two years;" adding, "It is of this we complain, it is against this we protest." For as the question now stands, we are not wrong when we assert that "our present fleet is the fleet of August, 1870, minus the *Captain*." for in designs we are scarcely an inch beyond those of 1866, when 16 inch armour was proposed. "Why" it is asked, "are we to lag behind the knowledge we possess, and turn out antiquated ships very likely to be obsolete before they are completed?" Since 1870, "we have done nothing that was not then known, contemplat-

ed, and provided for." Whether the fault lies in our political administration or not, may be a question for consideration, but the writer we are quoting has no doubt at all on the subject. He says: "It is wise to place over a purely technical department like the Navy a merely political head, and to give him power to interfere with the construction and administration of the fleet? It is wise to give him a political secretary, and also occasionally a junior lord, both of whom know generally nothing whatever of the matters they undertake to administer? If our Navy is an instrument of warfare, and not a mere organisation for the administration of political patronage, ought we not most carefully to clear out from every department of the Admiralty that political element which is always occupying itself with the means of obtaining votes from members of the House of Commons, &c?" In fine, "It is patriotism or want of patriotism which makes English citizens elevated to the rank of legislators dabble most earnestly and pertinaciously in those matters of public safety of which they understand least?"

The answer to this may leave the construction as much unsettled as before, but it is still the only and the proper answer. It is only when we reflect that the organisation of a service, be that organisation perfect or imperfect, must be wielded for political considerations, that we recognize the propriety of a responsible political head to govern the affairs of the Navy. After all, therefore, the question of construction must be considered apart from that of the administration, and nothing that we have said is meant to confound the distinctness of the two departments.

SELLING A WIFE.—At the Watford petty sessions, on Dec. 31, a navvy named Edmund Dean, employed on the London and North Western Railway, was brought up in custody, charged with marrying Jane Swan, a young woman of respectable appearance, while his first wife was alive. When apprehended the prisoner at first denied the charge but afterwards made a statement admitting the former marriage. He did not live very comfortable with his first wife, and at Watford, while she was at London, he was informed that she was unfaithful. He returned home unexpectedly on one occasion, and ascertained that this was the case; and he then sold his wife and furniture to the man whom he found in the house for 10 s. The prisoner repeated this statement before the bench, and was committed for trial at the Herts assizes.

MONSTER PROJECTILES.—The first issue of service projectiles for the 35 ton guns is now being made from the Royal Arsenal, and the massive conical shells, nearly three feet long, and weighing each about 700 lb., are conspicuous objects upon the wharf, where they are being placed ready for shipment. Nearly 250 of them have been made for the *Devastation*, which has taken her four "Woolwich Infants" on board at Portsmouth, and a large number of them are in course of manufacture.

A POWERFUL VESSEL.—The new broadside armour-plated ship *Superb*, which has just been commenced, will be of immense size, and will carry armour plates of greater thickness than any vessel of a similar description. She is in fact the most powerful vessel that has yet been laid down for the British navy. The following dimensions of the vessel will give some idea of her size:—Length between perpendiculars, 326 feet; extreme breadth 62 feet 8 in.; depth in hold, 18 ft. 7½ in.; burthen in tons (old measurement) 6,047 19 05.

REVIEWS.

The *British Quarterly Review* for January contains the following articles:
The Bampton Lectures on Dissent.
Frederick Denison Maurice.
The Ironclad Reconstruction of the Navy.
The Emperor Alexander and the policy of Russia.
G. H. Augustus Von Ewald.
A Contribution towards a theory of poetry.
Local Taxation.
Contemporary Literature.
The LEONARD SCOTT Publishing Company,
140, FULTON'S STREET, New York.

The *Illustrated Canadian News* for 15th February contains the following:

ILLUSTRATIONS:

Skating Tournament at the Victoria Rink, Montreal.
The Marmora Mines.
The Fire at the Quebec Court House.
"II Penseroso."
The Dominion Valentino for 1873.
Fashions for February.

ORIGINAL ARTICLES:

Random Thoughts on Social Differences.
St. Valentine's Day.
Gossips on Popular Scientific Subjects.—
No. III. Meteors and Aerolites.

ORIGINAL POETRY:

The Faithless Valentine.
My Valentine.
The Order of Release.

SELECTIONS:

Bookshelves. (*Pall Mall Gazette*)
Miscellaneous Items.
Home Items.

EDITORIALS.

OBITUARY.

MAGAZINE NOTICES.

REVIEWS.

NOTES AND QUERIES.

NOTES AND COMMENTS.

COURRIER DES DAMES.

NEWS OF THE WEEK.

THE NEW MAGDALEN. Chaps. xix., xx. By
Wilkie Collins.

CHESS.

The Military Commission of Calais, which is charged with the artillery experiments, has, according to the Paris correspondent of the *Times*, just made trials with a new gun-powder, whose explosive force and initial velocity are, it is said, of a nature to modify existing principles of gunnery. New and numerous experiments have become necessary, and as the presence of M. Thiers could only be of use when the commission has ascertained conclusively what are the effects of the new explosive, his journey to Calais is indefinitely postponed.

CONTENTS OF No. 7, VOL. VII.

POETRY.—	
Is It Worth the Price.....	82
EDITORIAL.—	
Macdonald on Tactics.....	78
The Military power of Russia.....	79
The cause of Prussian success.....	79
The British Navy.....	80
Too much cash.....	80
History as written.....	81
The Canadian Guard.....	81
The News of the Week.....	73
Reviews.....	81
CORRESPONDENCE.—	
British Columbia—G.W.G.....	76
SELECTIONS.—	
New Drill and Tactics.....	74
On the Best Detail Formation for the New Infantry Tactics.....	75
A Monster Steamship.....	77
The British Line in Attack Past and Future.....	82
Russia in Central Asia.....	84
REMITTANCES.....	77
MILITIA GENERAL ORDERS.....	76

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The Volunteer Review,

AND

MILITARY AND NAVAL GAZETTE.

"Unbribed, unbought, our swords we draw,
To guard the Monarch, fence the Law."

OTTAWA, TUESDAY, FEBRUARY 25, 1873.

To CORRESPONDENTS.—Letters addressed to
either the Editor or Publisher, as well as
Communications intended for publication,
must, invariably, be *pre paid*. Correspon-
dents will also bear in mind that one end
of the envelope should be left open, and
in the corner the words "Printer's copy"
written, and a two or five cent stamp (ac-
cording to the weight of the communica-
tion) placed thereon will pay the postage

The Accounts for Subscriptions to the
"Volunteer Review" are now being
made out, and will be forwarded by
post to each subscriber, and after al-
lowing a reasonable time for settlement,
if not paid, the paper will be discon-
tinued and the Accounts placed in Court
for collection.

THERE is no country in the world that has
the same amount of material wealth con-
centrated within so small a space as Great
Britain, and none so thoroughly defenceless
as far as military force is concerned—that
force being the most costly and least nume-
rically efficient of any other in Europe.

The whole question of armament is sur-
rounded with so many anomalies, that out-
siders stand amazed at the prodigality and
folly displayed on the one hand, the parsimo-
nious meanness, injustice, and fanatical
stupidity on the other. Here is a whole
nation of shopkeepers priding themselves
on their keen business, capabilities, whose
gains are reckoned by the hundreds of
millions of pounds sterling, deliberately de-
priving themselves of the means of preserv-
ing their wealth from the hands of the spoiler
under the plea of economy; at the same
time, making the skeleton of the military
force they are obliged to keep up many
times more costly than the huge armies
which their immediate neighbors control, and
which may any day be launched against
them for the purpose of emptying those
money-bags they have been so sedulously
engaged in filling, to the neglect of other
duties.

That we have not overdrawn this picture
of the true state of English preparation is
easily proved. With a population of nearly
thirty millions, a force of 50,000 sol-
diers is all that would be available in an
emergency, and the whole nominal muster
roll would not exceed 100,000 men of all
arms; yet this force costs the State
no less than £15,000,000 sterling an-
nually! The Whig-Radicals, to please
the cry of the commercial class for
retrenchment and the mob for equality,
reorganized—or the better word would be
attempted to reorganize—the British Army
some two years ago or so, with what effect may
be imagined when it is known that the
autocrat and originator of the whole move-
ment was a lawyer, with a clerk from the
civil service as his assistant!

Without referring to the unconstitutional,
unjust, and overbearing manner in which
the distinguishing principles of the scheme
was forced on the country, it is only neces-
sary to point to recent experience as de-
veloped in the Autumn Manœuvres to show
that it has culminated in making confusion
worse confounded. But another feature of the
scheme has been to *localize* the different
battalions of the British Regular Army. The
fortieth clause of the "Act for Reorganizing
the Army" has a provision for placing the
offspring of soldiers that are not otherwise
provided for as a charge on the local rates.
As a matter of course, this has raised an out-
cry amongst the ratepayers, and in com-
ments on one particularly outspoken docu-
ment in the shape of a handbill, calling on
"Englishmen, fathers, ratepayers and
electors" to agitate for the repeal of the
fortieth clause over a woman's signature, The

Broad Arrow of 25th January gives the
following account of how the Regular Army
is recruited:

"At present many of the poorest class of
our recruits are the sons of parents who
have been partly supported by the *parish*,
have themselves perhaps been reared by the
parish, most probably have received from
the parish what education they have, and
will fall back upon the parish when a grato-
ful country—the nation at large, mind—finds
them worn out in its service. The best
manhood of England amongst the poorer
classes is, in fact, reared in the country dis-
tricts and in the small towns, nurtured and
educated at the cost of the ratepayers, and
its last days provided for out of the same
funds, while, on the other hand, nine-tenths
of that manhood during its prime is creating
or defending wealth far from that little spot
which reared it, and must lay it in its coffin,
and all for the benefit of the great absorbing
centres which produce very little of the raw
material, or of the nation as a whole, in the
public services of the State. There is here
a great wrong and cruel oppression done to
the ratepayers of agricultural districts,
whilst the great mass of the small towns
throughout the country are literally groan-
ing under the weight of local taxation."

It would be impossible to compress within
the same space a more graphic illustration
of the social politics of England, and the
fearful bondage in which the commercial
interests holds the mass of the people, than
the paragraph quoted conveys. "Great
wrong and cruel oppression" to the agricul-
tural class means a state of affairs incom-
prehensible to those political philosophers
who believe the world was made for shop-
keepers alone, and it furnishes at once a key
to the mystery of the difficulties under
which any administration must labour that
honestly strives to advance the interests of
the country without reference to the monopo-
lists. Commanding a large amount of money,
those people can easily arouse the fanatical
narrow-minded and ignorant, by adopting
some popular cry. As for instance, the last
one was the "Landed Aristocracy of
Great Britain was the cause of all the evils,
social and otherwise, with which society was
afflicted," and this cry was upheld by JOHN
BRIGHT, J. S. MILL, and other lights of the
advanced Liberal school as sound political
doctrine; while Mr. GLADSTONE and his
colleagues are more than suspected of an
intention, if they can, of sacrificing the
landed interest to the convenience of the
commercial monopolists by a system of
wholesale confiscation.

The *Broad Arrow* recently complained of
the difficulty of providing recruits for the
British Army. With the highly enlivening
prospects offered in the paragraph quoted
and under the economy of the Whig-
Radicals, the only wonder we have is that
they are able to get a man at all; and if the
great mass of the lower orders were not kept
at starvation point by the manufacturing
class for the purpose of keeping down wages
at Birmingham and Manchester, not a man
would be got to serve a country that cares

so little for the most important and useful class of its population—its soldiers—as to allow them to end their days in a workhouse, when the State had received the benefit of their labour at a rate far below its real value.

It may very well be asked, what has soldiers recruited from the class which now forms the Regular Army and officered by competitive examination to fight for. There can be no particular sentiment or motive in saving GOSCHEN'S profits or GLADSTONE'S inheritance, nor is it a point of patriotism to protect, Baring's finance or JOHN BRETHER'S acquisitions from the Prussians. Most assuredly, of all existing military forces that of Great Britain has the smallest motive for enthusiasm and loyalty; and the Army Reorganization Scheme, by abolishing purchase, has severed the last tie which linked it to the landed interests.

That Great Britain has arrived at that period of military decadence in her history which all purely commercial states are sure to undergo, we are slow to believe; but her salvation will not be due to the trading interests of the class which has virtually governed her since 1832; but to what is her really material interest—her landed aristocracy. If the Conservative element comprised in her agricultural interest does not succeed in arresting the downward progress of the mere commercial spirit and interest, a dozen years will not elapse before the wisdom of the ATHENIAN SAGE will be justified in her case. "He that possesses more iron will own all this gold."

There is patriotism and life in the nation yet; but between the shopkeepers and the workhouse, both stands a fair chance of being extinguished in the interest of greed, cant, and stupidity!

In another column will be found an article from *Broad Arrow* of 25th January, on the "British Navy," which is terribly suggestive as to the extent in which its affairs have been mismanaged. In fifty years the enormous sum of between *thirty* and *forty* million pounds sterling has been squandered in crude experiments. Our contemporary may well ask, *and with what results?* as the answer is that the navy is "now in the same state of transition" as in 1861.

Our contemporary ascribes as the primary cause of failure, *want of organisation*, or as the *Quarterly Review* more clearly points out *want of administrative ability*, and the vicious system of allowing every shop-keeper who attains a seat in the House of Commons, and a portfolio in the administration of the day, because he is a more violent and unscrupulous partizan than his fellows, to *pull to pieces* and reconstruct a purely technical department, in which neither his previous training, knowledge, ability or character, would qualify him to be a clerk.

If England is to have either an army or

navy, the House of Commons must strip itself of the whole of its usurped power, and by placing both branches of the National Government in the hands of skilled officers, put them beyond the reach of political egotists or intriguers.

There can be nothing to hinder the Commander-in-Chief of the land forces being an *ex officio* cabinet minister, nor an Admiral exercising the functions of First Lord of the Admiralty. Neither the one nor the other need be political partisans; but they should be held responsible for everything connected with the services in their several departments—from the button on the soldier's coat to the construction of the first rate man of war.

The great cause of inefficiency in both branches of the service was the everlasting meddling of the mere politicians, and the splitting up into a lot of independent branches, for purposes of political patronage, what ought to constitute a single department.

We differ altogether with *Broad Arrow* that the manifest interests of the whole empire "must be wielded for political considerations." The service of the country is above all such paltry issues as partisanship, and the sooner that idea is realized in England the better for its interests. Neither is the present state of disorganization, wasteful outlay, and transition, a question of *construction* at all: it is in reality a problem involving what style or class of vessels shall comprise the future British fleet, and with what nature of artillery it may be armed. That problem will not be solved by members of Parliament—disciples of the Manchester School—nor such great naval reorganizers as CHILDERS or GOSCHEN. The sooner the system that brought such men to the surface is abandoned the sooner will a solution be arrived at, and the present generation may again see Britannia rule the waves—not otherwise.

Our gallant contemporary G.W.G. at Victoria, Vancouver Island, sent us an extract from the *Army and Navy Gazette* on "Infantry Drill," for which we could not find a place when his letter was published. We gladly insert it to-day, as the subject is one of surpassing interest to our readers, and it is only by collating as it were the opinions of every one capable of writing on the subject, that a true idea will be arrived at, respecting the proper "Tactics" to be adopted.

In the case before us, the writer is evidently an admirer of the Prussian system of mounted captains, and large companies of 240 men. If we understand anything of the matter, this *tactical* unit is both too small as well as too large. Small, because 240 men will only put 80 forward as skirmishers; too large, because it requires the

supervision of a mounted officer, in all its details, while, in reality he should only attend to its work, and if he needs support, will he not find it as difficult to get it from other companies as the British officer would? or is it a peculiarity of the British service that the officers in reserve are independent of any authority? The case made out is not applicable to any condition of the new tactics. Our battalion arrangements are far superior to the Prussians; and as our skirmishing, nor indeed that of any other army, will not be carried out by independent commands, we prefer for all practical purposes our own organisation; and if two companies are out skirmishing, two will be in support, and two in reserve, while a Lieutenant Colonel and two Majors will be responsible for the work performed. We also prefer Col. MACDONALD'S formation by fours to the Prussian *theory*.

We have endeavoured to keep our readers informed of all improvements in artillery or projectiles, and especially those designed for our naval armaments, inasmuch as the *first line* of defence of Great Britain must necessarily be most complete. The various articles which have appeared from time to time on this subject in the *VOLUNTEER REVIEW* have been characterized by the marked dissent exhibited to the conclusions arrived at by the theorists, and to the system of manufacturing the monster ordnance with which modern mechanical skill seeks to subvert mechanical impossibilities.

It has always been averred that seamen alone were the best judges of the weapons with which the British navy should be armed, because they alone understood the practical conditions under which such arms could be used. The soundness of the positions laid down is receiving confirmation every day.

The following from *Broad Arrow* of Feb. 1 is the latest:—

"Lieut.-Col. Alexander Strange, F. R. S., inspector of scientific instruments to the Indian Government, delivered a lecture at the United Service Institution on Monday evening last, on the expediency of mounting heavy guns at sea on the principle about to be adopted in the construction of the Bessemer saloon; Captain Goodenough, R. N., presided. The lecturer began by showing how the rolling of ships at sea interfered with the rapidity of fire and accuracy of aim in the guns. Our sea cannonade was, in fact no better than a sort of snap shooting, so much so that in the case of the *Mouarch* it was calculated that only one in ten of her shot would hit at a distance of a thousand yards. This was a state of things to be remedied, and the council had come to the conclusion that experiments should be made with Mr. Bessemer's system of controlled suspension as a remedy. He had already come to the conclusion that Mr. Bessemer's principle would secure the first necessity, namely, steadiness of platform. The adoption of the principle would, however, necessitate an entire change in the naval gun drill. Vertical sights would give way to spirit levels and electricity; and, indeed, Mr. Bessemer's

mer hoped to make the gun fire itself automatically the moment it had been properly pointed at the object. The self acting igniter was, he thought, ominently worthy of a trial, at least for broadside guns, there being a doubt as to whether the excessive effects of rolling to which bow guns were exposed would permit of its application to them. The council strongly recommended experiments to be made with Mr. Bessemer's principle of suspension, which, if successful, would secure the maximum of fighting powers in our ironclad ships. As to the reconstruction of our Navy, it was of no use crying out against it. We shall have another and another, so long as the restless brain of men created new inventions, for on one point all Englishmen were agreed, namely that their Navy should be the most advanced and strongest in the world. He believed that ironclad ships had reached their culminating point, and were doomed rapidly to decline. The artilleryists and the armour platers were in constant collision of opinion respecting their specialities, and he had come to the conclusion that a general distrust had risen up as to the sufficiency of armour plates to resist modern guns, and to secure safety. Already Sir W. Armstrong and Sir J. Whitworth engaged to make guns able to pierce 24 inches of plating; but Mr. Bessemer proposed a gun which would fire a ball of five tons at the rate of one a minute. Besides this gun the Woolwich Infant would become a baby indeed. If that would not be sufficient, he could make one to fire a ball of ten tons. Mr. Bessemer, having been called on by the chairman (Captain Goodenough, R. N.), briefly stated that with his system there would be no difficulty in securing a perfectly steady platform for the heaviest guns, and in addition he could give automatic firing and absolute certainty of aim. There was a time when gangs of men, wielding 28lb. hammers, made wrought Eisen; now Mr. Krupp's hammer of 60 tons did the same work. In the days of the 20lb. hammer a description of Mr. Krupp's 60 ton instrument would have been laughed at as much as his (Mr. Bessemer's) certain platform and gun firing a five ton ball.

In the discussion which followed, the views of the lecturer met with severe handling by Commander Dawson, R.N., and Captain Selwyn, R.N., who pointed out the increased difficulties of shooting at sea when the interfering element of a horizontal platform was introduced into a rolling ship; the guns could not be fired from a horizontal platform above deck on the weather side without shooting into the deck; that from such a platform they could not be fired through ports in the ship's sides without an increase of the vertical opening of the port which would be highly objectionable; and it was further pointed out that the horizontal swinging platform did not overcome the vertical motion of the ship, and that thus the levels of guns on the platforms would be, although parallel, at such distances apart in respect to their positions at the rise and at the fall, that the trajectories of the projectiles fired would vary to an extent to cause the shot fired at the higher level to go over the ship and some hundreds of yards beyond. The chairman, also, in concluding the meeting, made other practical seaman-like comments of a similar nature.

In a recent issue we warned our readers that the warlike attitude of the *Whig Radicals* with respect to Russia's proceedings in Central Asia, was the preparatory flourish

to as miserable a backdown, as that which produced the Washington Treaty. An article from *Broad Arrow* of 1st February, entitled "Is England Effaced," (which we re-publish in another column for the thoroughly English sentiment it breathes, and the glowing colors it paints the action of the GLADSTONE Government in which would have been highly gratifying to us if it did not look so like the *Kalidoscope* with its rapidly shifting tints, and about as reliable respecting the policy of our esteemed contemporaries' friends) taken in connection with a very clever article in the *British Quarterly Review* for January, confirms our expressed suspicions.

A perusal of *Broad Arrow's* article, conveys the idea that the GLADSTONE and GRINVILLE of 1870 and 1873 are quite different personages. That the criminal and craven surrender to Russia of the Treaty of Paris, and the truckling to our Yankee neighbors, which cost this country loss of territory, and sovereign rights of incalculable value; and English shop-keepers £3,000,000 stg. (to which they, the Yankees had as much claim as the whitechapel pickpocket to the *cly he sakes*, from the unsuspecting pedestrian); were acts of consummate statesmanship; and that the *United States* navy, nor *Peter the Great* "is not a terror to either John Bull couchant, or John Bull rampant." That England is in a position to make her influence felt—a fact we are pleased to learn, because, if other authorities speak truly, the objects of our contemporary's adulation are, have been, and intend to be, busily engaged in neutralizing that influence, and exposing her naked to her enemies.

The *London Globe* in an exhaustive article on Naval Administration gives the following summary of the manner in which the *Whig Radicals* have been providing for making "England's influence felt."

"A reduction in the personnel of the Navy and Marines of 5500 men; a reduction in the reserves of 6984. Year by year a failure of some 1800 tons of ship building; a reduction in our total fleet of about 30 ships; and of our ships in commission, during the first year's Radical rule, of 41; during the second, 10; during the third, another 9; so that in three years no fewer than 60 ships have been put out of commission without being replaced, 25 being actual reductions in our armaments abroad." The concluding words of our contemporary are as follows: "We cannot doubt that the truest economy lies in the Conservative policy of maintaining the highest degree of efficiency, and in paying full pay for active work rather than half pay and pensions to able-bodied, intelligent, and energetic men for doing nothing."

A careful perusal of our contemporary's article will lead to the suspicion that there are "certain identity of views" existing between the present English Administration, and the advisers of the Czar; for if we recollect aright JOHN BRIGGS' *identity of views* during the Crimean War, cost him his seat

for Manchester, and the antecedents of the party are not above suspicion.

It would appear that the interests of Great Britain in Central Asia have not been properly attended to. The Manchester school of politicians having a fundamental principle which is that of all retail dealers "for every man to mind his own business," a very good maxim if it could only be enforced. And in this connection we may as well say that as Prussia has already fooled Austria to her grievous loss and detriment, our contemporary need not be too sanguine that she will be found on the side of England in the event of a Russian War. It seems to us her account will decidedly be to take the part of that power, with which Great Britain would have small chance in the event of a *defensive* war. On the whole, the article is plucky, but as Flewellyn says only "prave word."

The *British Quarterly Review*, the great organ of the Whig Radicals and English Non Conformists, has an able and well written article on the Emperor ALEXANDER, and the Policy of Russia," which, one would at most suppose was written by, Friend JOHN BRIGGS. It gives a glowing account of the infancy of the Czar. His bitter bondage as first aid-de camp to JOHN'S special friend—Nicholas. His accession and the highly original as well as beneficial manner in which all the reforms in Russia were inaugurated and worked out, which reminds one very strongly of CUMBER'S Reform in the Navy, and CARDWELL'S in the Army. But it is with the Russian advance in Central Asia that the article principally deals, and the writer displays no small amount of strategical knowledge in political matters. It appears that it is an absolute necessity of Russia to seek an ocean frontier, all her great rivers run into the Arctic Sea, or find an exit through the territories of others, and hence the necessity of seeking an outlet for the productions of the Empire. The argument, by the way, strongly reminds us of the reasons our Yankee neighbors gave for seeking a share of our Fisheries—because they had none of their own—and is strongly suggestive of the national benevolence of England under the Whig Radical rule.

Well this great want must be supplied. Russian merchants must have access duty free, or nearly so, for the coarse manufactures of the Empire, which would sell no where else; and the Khanates, as those territories in Central Asia are called, must be coerced into the required measures. Declining to be coerced, why they must be conquered and annexed; and thus by inevitable fate, the fortunes of Russia, since the Whig Radicals have come into power in Great Britain, have been pushed to the line of the Oxus, and advanced more nearly to our frontiers in India in four years than during any previous forty. And the *British*

Quarterly Review sums up the whole of the situation by the following extract from the London Times of November 10, 1872.

"If the Russians have been obliged to use force, and if the use of force has ended in the occupation of more or less of the hostile territory, this ought not to surprise Englishmen, in whose dealings with Asiatics, precisely the same phenomenon has appeared. We began with a fort at Madras, and a factory on the Hooghley. Now, we rule 200,000,000 of human beings, yet there never was a time when conquest was made for its own sake; there never was a time when India directors and their servants, when Ministers and Parliament did not think we had too much. We conquered in spite of ourselves; we went spell bound to greatness; the country fell to us as of necessity. This is not now, for the Roman Empire was built up itself in this way. The Russian Gazette alleges that the dominion over the wild regions of Central Asia is falling to Russia after this manner without any deliberate seeking on her part. The conclusion of course is that a tendency so deep and strong, and so independent of human will must be full of benefits for the world!!! *Manifest destiny* appears here, as in the conflict between the Anglo Americans and the Mexicans or the Indians, and it is certainly as good an achievement to restore an old world as to conquer a new."

So the Russian advances on India is to be one of those grand achievements of *manifest destiny* of which the Whig Radicals are the apostles and active agents, and the Times, their great organ; it is true those oracular utterances are deprived of whatever little value they might have by the fact, that the Times is itself totally ignorant of the policy or motives of Russia, as the *British Quarterly Review* points out, but as a representative journal it is stated to be the means of securing for the Foreign Office "some insulting notes for stupidities written in Printing House Square."

It is suggestive of the means by which England acquired India that she should lose it by the advance of a power who has made the augmentation of Territory, a steady policy, and is not liable to be turned aside by the votes of a lot of peddlers, and the policy of *backing down* concealed under both articles, will hasten that *denouement*.

We have to return our thanks to Lieut. Colonel Fletcher, C.M.G., for the report of the annual meeting of the Frontier Rifle Association.

Our correspondent on cavalry equipment, is informed that the Militia Department have in store, full outfit in clothing, saddlery and arms for cavalry, which can be had on requisition through the Brigade Major of District.

CORRESPONDENCE.

The Editor does not hold himself responsible for individual expressions of opinion in communications addressed to the VOLUNTEER REVIEW.

EDUCATION IN THE RANKS.

To the Editor of the VOLUNTEER REVIEW.

DEAR SIR,—Permit a few light remarks upon a subject—which Baron Stoffel's criticism—as given in the REVIEW—have evoked, to find space in the too abbreviated pages of your journal.

I shall have no hesitation in following suit by imitating the Baron in his ingenious *brusquerie*, and at once joining issue with him upon the etiology which imputes Prussian success to Russian erudition. But were the *soi disant* intellectuality indisputable, its stimulating effect upon the morale of armies, would still remain as ambiguous as the elevated standard claimed for it, in that of Prussia's. It is said posterity will marvel at the education mania of the present. In the mean time I am perplexed to know wherein, or what constitutes the superiority of the educated soldier—as a mere combatant—over the average common sense of his comrade? Observe the two men in action, each probably emulous of the other, and taking stride for stride, delivering shot for shot, with equal coolness and dexterity. In camp the educated man might enjoy Cesar's commentaries in the original, the other, it may be, is content to cheer his Bivouac with the begrimed fragment of an old ballad. All this nauseous harping upon the assumed acumen indispensable to the modern soldier, is simply absurd, and from which the experienced one turns with contempt. Surely it needs no cultivated perception to perceive the fearful impact of missiles. Nor is it necessary to be perfectly *au fait* in Acoustics to hear and heed the ominous noise with which projectiles admonish their victims though—like Jack's stand from under—generally too late. Stupidity itself must, in the intimidating hustle, hum, and whirl of their flight, know that these dread messengers of fate are on the wing.

Under such conditions Tacticians may feel assured safety evolutions will become easy of acquisition to the most stolid, and that the very *elite* of Prussia's alumni could not avoid or brave, the inevitable in action, with more intelligence or recollection than could the man of average common sense. Fearing to become discursively obtrusive in my comments and on your space,

I remain, dear sir, yours &c.,

SABREUR.

New Hamburg, 12th Jan., 1873.

To the Editor of the VOLUNTEER REVIEW.

DEAR SIR, Will you kindly inform me as to whether the Government makes the usual grant to efficient Volunteer Regimen-

tal Bands as heretofore; and if so, does the Commanding Officer of each Battalion continue to receive the same?

Yours &c.,

INQUIRER.

The allowance for Regimental Bands is still in existence, but is only paid to efficient bands.—Ed. Vol. Rev.

The Annual Target Practice of the Markham Volunteer Company, No. 6 12th York Rangers, came off at Headquarters on Saturday, 1st inst., under command of Capt. Rescor. The day was cold and windy, but there was exceedingly good shooting. The company turned out well and every man enjoyed himself.—Com.

FRONTIER RIFLE ASSOCIATION.

The Eleventh Annual meeting of this association was held at Franklin Centre, County of Huntingdon, Quebec, on the 11th February. There was a large attendance of members. The 50th and 51st Battalions and Huntingdon Cavalry were well represented.

Lieut.-Colonel Fletcher, President, in the chair, the efficient Secretary, Lieut.-Colonel McEachern, was at his post as usual. After the minutes of last meeting were read and approved, the treasurer's report was read showing the receipts for the year were \$516.94, and disbursements, \$434.56; leaving a balance on hand of \$83.38. The election of officers then took place, the following were elected:

PRESIDENT.—Lieut. Colonel Fletcher, C. M. G.

VICE PRESIDENTS.—Lieut.-Colonels Rogers and Ried; Majors McNaughton, Lucas, and Mr. Fee, Dr. Sheriff; Captains, Breadner and Johnson, Revd. Wm. Masson.

SECRETARY-TREASURER.—Lieut. Col. McEachern, C. M. G.

COUNCIL.—The office bearers, and Captains of Companies belonging to the Association. The Firing Range and Finance Committees were appointed, and are composed of the same members as last year.

A discussion took place as to where the next Annual Matches would be held; finally Havelock was chosen. The time for the matches was left to be decided by the President and Secretary, with the understanding, that the latter part of June would be preferred, if it did not interfere with the Annual Drill.

The continuous success of the Frontier Association is gratifying to those friends and supporters who have so well sustained its operations since its formation. The Association has entered upon its eleventh year with brighter prospects than ever. The next annual matches bid fair to exceed in interest and value of prizes, any of the prize meetings yet held on the Frontier. The Association is affiliated with the Dominion, and Quebec Provincial Rifle Associations, and will send some of its crack shots to compete at Ottawa for a place on the next Team for Wimbledon.

NAPOLÉON III.

With soft slow step and bated breath,
Approach him laid in state;
With head uncovered and undecorated
Of sovereignty, the fate;
Behold the e. ding of renown,
Napoleon dofs to death his crown

Is this the will inflexible,
Inspired in wondrous wise
To gain a throne by grades and stand
As high as man can rise
Whose wand might undulate like sea
The mass of subject men? This he!

Is this the one who deemed he held
All Europe's destiny,
Could make a continent his own
By deep diplomacy?
"Solferino's hero" now—anon,
The vanquished Sire? This is the one!

Is this the man who would uprise
A wilderness of swords,
To help the weak against the strong,
The Turk against Russian hordes?
England's firm ally at Sedan,
In cause of Right? This is the man!

Is this the man ambition, hate,
Impelled to frantic war,
His hosts against the Prussian host,
The flower of both to mar?
Who fought till blood like rivers ran,
In cause of wrong? This is the man!

Is this the man of mystic traits,
Of good and evil ways,
Who soiled, and fell, and saw his throne
And sceptre rent away?
Who left the drama at Sedan,
Ex-Emperor? This is the man!

Is this the form almost adored
By France in fortune's flow?
Is this the form almost adored
By France when lying low?
That plunged her deep in woe and storm,
Then left the scene? This is the form!

Now softly step away and muse
On glory and renown,
How "happeneth one event to all,"
Nor spareth death the crown;
And learn, 'tis all worth striving for,
To be in heaven an Emperor!

L.L.L.

Farsboro, January 22nd, 1873

THE BRITISH LINE IN ATTACK, PAST AND FUTURE.

(Continued from Page 81)

THE ATTACK PROPER.

Old Method of Carrying a Position.—Frederick the Great used to wish his troops to carry positions at the shoulder, but, even during the days of flint locks, fire asserted its superiority, when properly used. British troops generally deployed and fired a volley or two before charging, or the attacks were covered by skirmishers, who, however, usually retired behind the line when within musket-shot of the enemy's closed bodies, apparently because there being so little difference between the range of their weapons and charging distance, it was thought well to clear the front to allow the closed bodies to settle the matter between them. The importance of an uninterrupted advance was manifest, but even at those short distances the want of the protection of fire, just before charging, was often felt by the assailants if the defenders remained cool, and the front ranks therefore, sometimes of their own accord, maintained an independent fire during an advance.

Modern Requirements.—Now, owing to the increased range, the assailants are unavoidably a longer time under fire. Point-blank range is extended to 300 yards, within that distance, before charging distance is reached, there is time now for some ten or a dozen volleys to be poured into them by the defenders, who may be lying down. Modern requirements are therefore that the

attack proper must be covered until the last moment by skirmishers: and, more than ever, that the steady unflinching advance, which infuses such moral force into the skirmishers, and which carries in it such power, moral and physical, shall be retained in essence by those in support, with such systematic modifications, however, as will afford them as much security (short of lying close or keeping out of the fight) as could be obtained by individual independence in the unreliable swarm.

Proposed Method of Advance.—It is necessary to adopt some method of advancing that will embrace the various means that have been pointed out for neutralizing the advantages of the defence. The requirements are that the advance should be maintained, that the fire of the skirmishers should be continuous; that it should be delivered lying down or presenting the smallest possible mark to the enemy; that the movements of all bodies should be made at the double, and the smallest possible mark again offered.

Advancing in a general line is therefore only suitable for skirmishers when they are required to fire very little, or when opposed to inferior troops. To maintain a continuous fire, as in the attack proper, the advance across open ground must be by alternative bodies.

The advance by alternate files was theoretically good, but impracticable. It left the soldier too much to think about; officers cannot tell at a glance what files are in error, and it speedily becomes a general line. Alternate sections are better; but clearly the fewer fractions there are the more simple the movement, though their dimensions must be limited to an extent which will enable men on the outer flank to conform readily to the movement of the directing flank. Moreover it is necessary that one body advancing should be adequately protected by the fire of the stationary body. To meet these requirements—simplicity and efficiency,—i.e., that the fractions should neither be so numerous as to be complicated nor of so large dimensions as to be inefficient—the skirmishers covering the front of a battalion in line, or of any smaller body, should, as a rule, be divided into right and left skirmishers. Exceptional circumstances might require further division, but no circumstance could require the alternate advance of skirmishers of battalions.

To enable the closed bodies to move at the double, it would only be practicable to cover short distance at a time, and the advance by alternate wings of battalions would be preferable to a general advance by short dashes; as by the latter method there would be nothing to mark the time to ensure that steady, even, unchecked progression which is a necessity, while by the former the moment for each wing to rise and double forward is distinctly marked by the other lying down, and the progress is thus as even as the action in walking of placing down one foot to advance the other.

EXECUTION OF A SIMPLE ATTACK

It is very desirable that an attack should be carried out, if possible, with one vigorous forward effort. The assailant suffers less, and the effect is more complete. But this can generally only be insured by going carefully and deliberately through all preliminaries; the reconnaissance, the choice of point of attack, the preliminary cannonading, disguising the real point of attack, the correct estimate of adequate supports and a reserve. In proportion as these matters are settled, so will be the completeness of the

plan observed, success now more than ever depends. "Clear plans—no fight should be begun without a knowledge of its object . . . the fight that fluctuates is the most bloody one." (Memoir by Major Tellenbach, pp. 22-3.) The deliberation however, must not cause hesitation or with shelter trenches, &c.

"When obliged to attack an entrenched enemy it should be done instantly, without allowing him time to finish his works. What may be of advantage to day may not be so to-morrow." (Frederick the Great's Instructions, p. 101.)

The following is proposed as a method for carrying out a simple attack.—(Battalions to be of 10 companies—of, say 75 R and F— including two flank companies composed of men picked for good shooting and activity. Distance for these two companies not to be allowed in line, their places when not covering the advance being in rear of the two outer companies.)

The brigade or division intended to make the attack is formed in one line, out of shot and if possible out of sight of the enemy, at a distance, say, of 2,500 yards from his position. If it can be formed nearer, so much the better.

Troops intended for the attack should be relieved of all anxiety about their flanks, for the due protection of which separate arrangements should be made by the General commanding.

I. a. Those battalions intended for the first line to be deployed with intervals of 12 paces (not allowing for the flank companies).

Those battalions told off as second line to be four deep, with deploying interval.

b. The line advances as near as it can with safety to the position of the enemy (which is of course being cannonaded), say, 1,200 to 1,000 yards—and lies down.

II. a. The battalion of the first line now cover their front by throwing forward a half company of each of their flank companies. These advance, making the best of their way towards the enemy's position.

b. When the skirmishers have advanced 150 paces the remaining two half flank companies and the outer companies advance in support in single rank.

When, if at all, the skirmishers during this phase should be reinforced with the remaining half companies, must depend on the judgment of the senior officer of the four companies now on the move.

This preliminary to the attack should be executed with dash, and if the enemy's skirmishers are out, there is all the more reason to get on rapidly to short ranges without wasting time.

c. When the supports have advanced 150 paces, the battalions of the 1st line advance in the formation most suitable to the ground.

III. a. The skirmishers having taken up a position as near as possible to the enemy, say 350 yards, lie down and open a well sustained fire against him reinforced now, if not before, by the odd half companies

b. The supports lie down at their proper distance, or as near as 50 yards if possible,

c. The battalions lie down

IV. When, by the fire of artillery and of the skirmishers, the enemy's fire is deadened, and the moment for the

attack seems to have arrived, the impetus is thus given from the rear.

- a. The second line receives the order to advance.
- b. When it comes to within 150 paces of the battalions of the first line, these advance by alternate wings, dashing forward 50 paces (in the attitude prescribed for skirmishers) and lying down.
- c. When the battalions of the first line arrive within 100 paces of the support (now consisting of two companies per battalion, one on each flank, (these advance alternately in like manner, throwing forward a half company each to reinforce the skirmishers (not simultaneously, but by wings as they approach.) (The skirmishers now consist of three companies per battalion, and there are two half companies in support.)
- d. The moment they are reinforced, and as the right wing of each battalion lies down, its right skirmishers spring forward 25 paces, and cover the forward rush of the left skirmishers which is made as the left wing of the battalion lies down. The movement is then continued in alternate dashes of 50 paces, the battalion and its skirmishers coinciding as nearly as possible.
- e. When the battalions of the second line reach the position lately occupied by the first line, their advance is conducted in the same manner, *i.e.*, by alternate wings doubling 50 paces and lying down.

If the enemy remains firm, lying close and firing steadily, the skirmishers will probably flag in about 150 paces (*i.e.*, 200 yards from the enemy). They should be at once reinforced by the two half companies in support which may carry them on another 50 yards. They will then probably shorten their dashes allowing the battalions rather to gain on them, and they may be urged on another 50 yards, when it would seem that the enemy must rise, or at any rate he will probably be visible. Should he, however, having good cover, still lie close and maintain his fire, the skirmishers must be immediately reinforced with a company from each flank of the battalion, and more ground saved.

Should he rise and fire kneeling or standing from a well ordered line, the battalion must close on the skirmishers, open quick fire for a short time, still working forward, and charge the moment the enemy's fire slackens. But the fire of battalions must on no account be resorted to unless the enemy is firm and distinct, and the distance charging distance, or almost.

Should the enemy give way, the skirmishers must be at once relieved, and he must be pressed as closely as possible, and hurried over any supports he may have prepared in rear, which will be the best means of disarranging them.

Business of the Second Line.—When fire was less powerful it was important, as the assailant's first line approached charging point, that the second line should be close at hand, either to follow up with its fresh, unshaken, muscular force, the vibration of the shock of the front lines, or to sustain muscularly the shock of the counter-attack. There was a crisis which rapidly passed away.

Now "fire power" is so increased that the employment of it must not be relinquished, and the charge resorted to, until not only is the distance very practicable, but the enemy's fire very weak. The same applies to the defenders and the chances of success

of a direct counter-attack. If they were to attempt a charge even at 100 yards while the enemy's fire was strong, they would throw away much of the advantages of the defence, and would probably be mowed down.

The second line is therefore required.—

1. By its moral force to enable the first line to continue to gain ground.
 2. To be at hand to take up the fire (relieving the first line) if it should appear to be slackening.
- Advancing by alternate wings, the second line will maintain its distance of 150 yards, while the work of the skirmishers and first line is easy; but the dashes of these will shorten as the work becomes hotter, and the second line will then gradually gain on them. This will give ample time for the "fire fight" and it will be time enough if the second line is at hand when the first line is within 50 yards of the position. Victory cannot in these days be snatched in a moment by a direct charge of the defenders. The battalions of the first line, with their pouches full, will be able to take good care of themselves for some minutes and the crisis can always be staved off by holding on the defensive the ground that has been won.

The foregoing plan is based upon our own old and tried principles, with such modifications as the increased power of fire and the recent experience of our neighbours seem to demand.

1. The skirmishers and supports are furnished from the battalions in rear of them, so that they may be reinforced until the whole of what was the first line is expended without mixing corps.
2. The intensity of fire is maintained (exclusive of reinforcements) during the attack, notwithstanding casualties, causing the skirmishers to close in a given direction; the battalions doing the same by the diagonal march the extent of front would be maintained by moving up troops from those supporting the flanks of the attack.
3. In the advance to the attack proper, not only is the mark for the enemy constantly changing its distance, but his attention is attracted (if at all) right and left by the alternate advances. The movements of the battalion suit this. When the enemy's attention would naturally be drawn in a greater degree towards the advanced position and fire on the left, the right half-battalion makes its rush to the front, and when much of his attention would probably be diverted to the right, the left half-battalion dashed forward.

Positions of the Officers.—A captain cannot in a serious affair, command his company from the position assigned to him in the present Drill book. In these movements the position of officers commanding companies must be the old one, *viz.*, on the inner flank of the front rank. In action men can readily execute simple movements to which they have been drilled, and only want the signal; but, with an enemy in front, they ought not to be required to turn their ears back, still less to look behind them to discover amid the din if their captain wants anything done. From the captain's old place they can be commanded well. A glance of the eye to a flank catches his posture, and the things is done. The "guides" are no substitute; they will be cheerfully obeyed when they fall into the command, but in danger the soldier likes to see his captain. It may be said that

the commanding officer is in the rear—that is theory, he is not always there; out if he were, it would be an additional reason why the captain should not be there also. The latter can catch the commanding officer's word or gesture by a half turn, but it would never do for all the men to be turning to catch the word and gesture of their captain. What there is to be done in rear can be better supervised by two subalterns, who have nothing else to do, than by the captain, who has the burden of the command besides.

It may be urged that the foregoing is an impossible fight. That may be true, but most British officers will admit that if an enemy could be found to hold out as the defenders have been supposed to do, there would be no difficulty in getting British soldiers to carry out the part that has been assigned to the assailants. And, *vice versa*, if such assailants could be found, it would be nothing new for British soldiers to stick stolidly to their posts. But it would be absurd, when striving to point out the perfection of duty, to cut short an imaginary battle at any point with the remark, "At this period the enemy will decamp." Napoleon I. made such a miscalculation in his last battle.

CONVERGING ATTACK.

The converging attacks practised by the Prussians are most deserving of attention. The principle is sound; a superior fire converges from the arc upon a part of the enemy's position which forms the chord. The different attacks incline or converge towards a named one, so that the greatest number of men that the space will allow reach the enemy at the critical moment. Briefly, it might be arranged thus:—

- I. The whole of the attack is deployed on one line forming a base double the extend of the portion of the enemy's position to be attacked. For convenience' sake say five brigades, which are told-off alternately from the right for first and second lines.
- II. a. The flank brigades (1 and 5) of the first line advance in the manner prescribed for the simple attack, their skirmishers taking up a position as near to the enemy as possible, say within 200 yards, strongly reinforced, and directing their fire diagonally inwards against the enemy.
- b. The centre brigade (3) advances at the same time and in the same manner until its skirmishers are about on a level with the battalions of the outer brigades—*i.e.* about 500 or 600 yards from the enemy.
- III. Artillery can be massed either on the place vacated by the outer brigades, and a battery or two, if practicable, may be further in advance, in the intervals between the brigades.
- IV. Infantry, artillery, and if the ground permit, cavalry are in echelon in rear of the outer flanks of the attack, to support and feed the attack and guard against a counter-attack.
- V. a. The two brigades of the second line now advance, and the same thing follows as in the simple attack; the battalions of the third brigade moving off when the second line is within 200 paces from them.
- b. When the centre skirmishers spring forward, the battalions of the flank brigades (who were on a level with them) advance, including inwards.
- c. The supports and skirmishers of the outer brigades follow suit at the proper moment, inclining inwards.

OBLIQUE ORDER OF FREDERICK THE GREAT.—No one knew better than Frederick the Great the meaning and value of turning a flank, and yet he makes distinct mention of what he calls his "oblique order." Many of his readers, including perhaps Napoleon I., have evidently understood his mention of the oblique order as something distinct. It seems not improbable that it may have been the parent of the converging attack. There was, of course, some risk in it, but a great deal of reality. In former days the overthrow of the assailants would depend on active measures being taken by the defender against the exposed flank. But, first, few armies have adopted the defensive with the Duke of Wellington's quiet determination giving the enemy all the labour and risk, and then knocking him over: the defensive with foreigners being generally a sign of diffidence. And second, Frederick rather liked an enemy to come out of his position, for he was generally prepared to return the charge vigorously and enter with him.

The exposed flank was therefore probably very well supported. In these days the fire of the assailant would converge from a long distance, his exposed flank would be covered against fire, a direct counter-attack against him would be questionable, and he must provide against a flank attack by echellons in support and the fire of artillery.

INFANTRY DRILL.

An "Infantry Officer" sends us the following very sensible remarks upon this important subject:—"The columns of the *Times* have of late been opened to several military writers, who advocate various immediate and sweeping changes in our drill; more especially has a 'Subaltern of the Guards' endeavoured to overthrow with levelled lance the obstructive windmill of the *Field Exercise Book*. In the present transition state of our forces it cannot but be of benefit that public attention should be loudly called to this important subject. Would you then kindly permit an officer of the line, through the medium of a professional paper, to add his mite of observations to the questions at issue? The three points principally advocated are—1. An immediate and radical change in the drill book, to adapt our field exercises to the requirements of modern warfare. 2. An intermediate present abolition by General Order of the *Field Exercise Book*, to prevent wrong principles being taught. 3. The introduction into our drill of the Prussian company column. If the object of all drills were simply to lead the troops in suitable formation against the enemy, then, indeed, half-a-dozen pages of a new drill book would be quite sufficient; but every practical soldier recognises as a truth that the greatest difficulty on service is to keep the men in hand while in action and under fire—a difficulty greatly increased since modern requirements demand a much more extended and looser formation. Now the real object of drills is to teach the men the habits of discipline, and of prompt unthinking obedience, and to teach the officers the habits of command. It takes years of daily and unremitting training in the drill field and barrack room before a soldier can be brought to such a state of discipline as, in the flurry and excitement of action, to hear and at once attend to the orders of his superiors. But on the other hand, a lifetime is often insufficient to teach the officer how to command. It is not enough to give correct orders; the manner of giving orders, so as to rivet and enforce attention and obedience, is an art in itself.

Some few are born with it, others acquire it in course of military service, often unconsciously, while too many in a lifetime fail to acquire this all-important art, and with it the confidence of their subordinates on service. Now, strict, accurate, and rigid drill is the one great means of teaching officers to command and soldiers to obey. If an officer is deficient in the native art of commanding, the word of command becomes as it were a magic formula the use of which enforces obedience and conceals from the men, and perhaps from the officers, the latter's want of professional aptitude. It is, therefore, essential that accurate drill movements should be constantly practised in the Army, in order that the habits of commanding and obeying, acquired by constant practice, may be preserved in the vital moments of action; and if, on the other hand, our drill were reduced to half a dozen movements really required on service, the continued reiteration of these few on the drill field would become so tedious that attention would inevitably slacken, and man would be driven out of the service by ennui. From this point of view the maintenance of strict and varied drill formations would appear to have important advantages, which should not be relinquished without reflection. The experiment proposed, of abolishing the present drill before establishing a new one, would be a fatal playing with edged tools. Officers left to invent their own movements and words of command would often find themselves fatally hampered for want of the accustomed formula, and might gravely compromise themselves by betraying to their men how inefficiently they were able to control them without the aid of traditional forms. On the other hand, officers and men strictly and carefully trained and disciplined according to existing forms, would very soon at the will of the general adopt without confusion new forms demanded the circumstances. Though unknown to the drill book of his time, Sir C. Campbell had no difficulty at Balaklava in making the 93rd receive Russian cavalry in line. To charge in extended order, to seek independent cover by companies or sections, to open out literally and lie down when under fire without cover, would be an easy matter for well-drilled troops, though not previously trained to it, and a General Order giving such directions would be sufficient to have these and similar rules carried out on service, but let us not for these objects sacrifice the means by which we acquire discipline. The cry for the Prussian company column formation in our Army seems to be equally unnecessary. The Prussian company, 240 strong on a war footing, consists of two divisions three deep, or three divisions two deep (the third rank, picked marksmen, being in the latter case formed into a separate division). In company column these divisions are sometimes in quarter column, sometimes in double column of subdivisions on the centre. This formation in itself gives no peculiar manœuvring facilities. It is quite large enough to be a very palpable mark for artillery and infantry fire, as was proved often enough in the late campaign; it was a very awkward formation as a support to skirmishers, and as such has been abandoned by the Prussians in their late Autumn Manœuvres. Those who wish to introduce this formation in our Army seem to follow the shadow instead of the substance—the form instead of the spirit. The real Prussian advantage lies not in the formation of the company column, but in the constitution of the company. The Prussian company is officered by five offi-

cers, inclusive of the captain—the latter is mounted in the field. In the broken and detached nature of modern warfare, when a Prussian company is in action, one half, or one division at least, is skirmishing, the remainder are in support; the mounted captain commands both the skirmishers and the supports; they are all his own men, in whom he is equally interested, and he takes care that they are supported, sustained, relieved or reinforced as may be required. In fact, in the Prussian mounted captain we find a link in the chain of the responsibility of battle, which in our service, is almost entirely wanting. It was beautiful to observe how harmoniously supports and skirmishers worked in Prussian Autumn Manœuvres, while a deficiency of harmony was very observable in our own. When an English battalion sends out, for instance, three companies to skirmish, and three to support, the skirmishers and supports are quite independent of each other; the supporting captain will take no orders from the skirmishing one. The commanding officer cannot look to everything; one of his majors commands the reserve, the other, with no specially assigned duty, looks probably after the direction of the skirmishing line, and the three supporting companies very likely amuse themselves by trying to preserve their relative dressing. Now, if a link be really here wanting, as above shown, would it not be better, instead of adopting a Prussian not very good formation, to make other modifications suited to the genius of our Army? I venture to suggest the following:—Form every two companies into tactical and organic unit under a mounted officer, something like the squadron in the Cavalry; in other words, appoint five majors to each battalion—one for the depot companies, four for the service companies. Let the major be the commander of the two company unit in barracks, on parade, and in the field. Establish an intermediate link between the captains and commanding officer, more real and thorough than the present nominal and anomalous post of majors of wings."—*Army and Navy Gazette*.

A NARROW GAUGE.—The novelty of a miniature locomotive engine and carriages running upon a miniature railway with a gauge of only 18 inches, and doing good service, was witnessed for the first time at the Royal Arsenal on January 10 by nearly all the principal officers of the various departments. The rail, which at present extends only from the West Wharf to the back of the shell foundry, is composed of iron plates cast in the royal laboratory, each of the plates being 6 feet long, and weighing about 3½ cwt. They are laid simply together on a bed of concrete, keyed together to preserve their position, and the line appears firm and durable without the aid of sleepers or bolts such as are employed in the construction of ordinary railways. It was designed and carried out by Colonel Scratchly, Royal Engineers, inspector of works at the arsenal, who, accompanied by Colonel Milward, Colonel Fields and other officers, went on the trial trip this afternoon, and found it completely satisfactory.

The British navy in commission on January 1, comprised 160 steamships and vessels including yachts, tenders, and gunboats, mounting 1,283 guns, and manned by 28,371 officers, men and boys; and 64 sailing ships and vessels (including 25 coast guard tenders), mounting 439 guns, and manned by 4,697 officers, men and boys; giving a grand total 224 ships and vessels, mounting 1,722 guns, manned by 34,328 officers, men and boys.