

may place himself outside cover with assumed indifference; or if it should be the first time under fire he might expose himself for some minutes, in order to ascertain the effect of the whizzing of the shot on his nervous system. His essential influence under these circumstances is bounded by some such short word of command as "battalion take ground to the right 500 paces," if he should observe a better position; or if he should consider the moment favorable for an attack, he will simply say, "Now, forward, march, hurrah!" and then rush on. If the troops are lying down, they arise just as they are; perhaps some of the men, becoming wild, think it their duty to commence firing in the direction of the enemy, their bullets whiz past the ears of their commander, who is in front, and then the whole rout (*tross*) rush after him to the attack. Some there are who are of the opinion that discretion is the better part of valour, and that it is better not to throw dirty water away until they got clean; such hold back till those who have gone before have carried the position, when they follow with loud shouts on their tracks.

This confused an irregular mode of attack should not be condemned as faulty; on the contrary, it is a necessary result of the new arm, and the peculiar training of the men. The great and zealous care with which from year to year we mark, verify, and note down each shot at musketry instruction, and the virtuous indignation with which every miss is put to the wrong side of the account by the instructor becomes paid with interest. We should bring as many men as possible into the condition of being able to use their arm according to their own judgment.

This mode of fighting has an invariable result; the original depth of the order of battle, which consisted of a support behind the skirmishers, and a reserve behind these, is now superseded by a greater extension of the front line.

The far and sure-carrying arms of precision of the present time forbid supports and reserves in closed columns, except where the ground is favorable for such formations. It is apparent that either the old secondary formations have become impossible on account of the greater range of the missiles, which occasions the distance to become so much increased, that there can finally be no relation between the supports and the engaged line; or the supports see in the loose, opened out formation the proper means to adopt, and thus of their own accord they rush up at the double into the first line. With regard to this point of view it would be well to study all the battles of 1866; it will be found that nearly all the companies of the second line soon forced themselves to the front. The mass of companies forces the line to extend laterally, as every newly arriving body has a tendency to join itself on at the wings.

In this striving of the supports and reserves to force themselves forward into the fighting line lies the impossibility of preserving the old order of battle, or even the primitive tactical formation.

Every division in the rear which has hitherto remained in close column rushes in where necessity or a possibility shows itself. An interchange between the engaged line and its supports is evidently impossible; there is not even the smallest guarantee that a company will fight together with the skirmishers which it has itself thrown out, or that the companies of a battalion, or battalions of a regiment, will ever come together. Let any one compare the state of every single battle of 1866, with regard to the positions of every division of the army

after the troops had been well engaged, and the old-fashioned order of battle. It would, however, be very rash to conclude that all this was a great series of error; far better would it be to ascertain how far these new phenomena are legitimate and reasonable.

The mounted officers are obliged to dismount, which makes the supervision and direction impossible, which is so easy in peace-time manœuvres. Frequently the dismounted staff officer, somewhat unaccustomed to quick marching over stock and stone, is scarcely able to keep up with his battalion; thus the breaking up into columns of companies is for him a solution of his difficulty. He thinks that certainly the four officers commanding companies will know what to do, so he attaches himself to a company. The original officers of the lines are in the same predicament; their lines are broken up and scattered in all parts of the battle; thus they are obliged to give up all idea of commanding them, and attach themselves to the first company of infantry that offers, and, in order to do something, command that. It thus happens that some companies, favored by chance, have besides their own captain, a major, a colonel, and a general as well; the company will not perhaps be better commanded, but those officers will at least have done all that remained in their power. They are all in the front line, and by their personal example influence those among whom they have placed themselves, but in fact they have become mere captains of companies; the whole line of battle has thus become nothing more than a fight between a number of company leaders and the opposing enemy.

This manner of exclusively fighting by columns of companies, and their employment on all occasion, is a momentum which has peculiarly developed itself in the Prussian army. For this reason our (Prussian) captains are relatively the most precious portion of the whole army.

Should foreign armies think of imitating our company column fights, they must take into consideration how it stands with them with regard to the fundamental principle; that is, the relation between the officers and men. They will otherwise adopt the disadvantages without gaining the benefit.

There lies also the great defensive power of our arm, an element which renders these narrow irregular lines more capable of resistance than is apparent at first view. They will always be able to repulse feeble attacks; even the smallest detachments will not allow themselves to be ridden over without ceremony.

It must be distinctly understood that the loose irregular formations, which we have here alluded to, are not to hold good on all occasions and in all circumstances. So long as an officer believes himself to be in a position to gain the same results by keeping to the systematic forms of the service, he is quite right to do so, but let him recollect that one atom too much of this is pernicious. Let officers look to the spirit of these apparently irregular formations, and not allow themselves to be taken by surprise or be disconcerted should they manifest themselves. An army which cannot trust in the individual worth of its soldiers, so far as to let them fight in this manner, cannot reckon on the advantages to be derived from the operation of the breechloader.

(Concluded in our next.)

The government of Victoria have sent an order to England for 120 miles of steel rails.

A kilometer, so frequently mentioned in our despatches from the seat of war, is about five-eighths of a mile.

THE DEFENCES AT DOVER.

Perhaps at the present moment a word or two about the fortifications of Dover will not be out of place. Last week we announced that a board of officers had been appointed to inspect the different forts and guns around Dover, and from various sources we hear that notwithstanding the importance of our garrison in a military point of view, the fortifications have nevertheless been sadly neglected. Dover of itself, of course, may justly be considered a natural fortress, and if only properly armed might bid defiance to both fleets and armies. We have, however, ascertained that there is not a single gun mounted on any fort in our garrison that would penetrate even a third-rate ironclad. The best gun mounted is a 7 inch breech-loading Armstrong, only firing shell shots, and a blow from this projectile against the broadside of a modern man-of-war may be compared to the cracking of an egg against a wall, experiments at Shoeburyness having proved this to be true. The next best gun is an old smooth bore 42-pounder of an obsolete pattern, which was never more than provisionally adopted in the Service. The Citadel is armed exclusively with 54-pounder Widge guns, also of an obsolete pattern. It is unnecessary to enumerate the guns of a less calibre, as what we have already stated is sufficient to show the state the fortifications around Dover are in. We must, nevertheless, add that there are several other guns of a heavier nature, such as 12-ton and 7-ton guns, but by the orders of a Liberal Government they are, unfortunately, at the present time lying on skidding at Archcliffe Fort and Guildford Battery. Colonel Collinson has returned from his tour of inspection, and now there is a rumor to the effect that it is the intention of the authorities to have these guns mounted; but even supposing it to be true, the batteries could not possibly be prepared for their reception by this side of Christmas.—*Dover Chronicle*.

THE DEFENCES OF THE MERSEY.

The Liverpool *Albion* says, that since the subject was discussed in the Town Council, it has taken some pains to ascertain the real condition of the forts. After entering into details with regard to the condition of the existing defences, it continues as follows: "It will thus be seen that our fortifications are useless. A vessel carrying heavy guns, or 10 or 13-inch mortars, could lay off from 3000 to 4000 yards, and send shells into the docks and shipping with comparatively little danger from the present forts. It is impossible to conjecture why they were built, seeing that, if an ironclad vessel entered the Mersey, nearly all the guns would be utterly ineffective, and the forts prove slaughter pens for the garrisons, and in action they could not fail to do damage on both sides of the Mersey. It will scarcely be believed that, at the North Fort, on the Liverpool side, the north casemate is so constructed that a shell entering the port would slaughter all the gunners, or, if perchance it found its way through the doorway, the magazine would be in danger, as it is only three or four paces to the rear of the casemate, and would be struck by every shot or shell which passed through."

In spite of the war, a chess congress is being held at Baden-Baden.

Paris ladies now wear the same style of hat that was worn one hundred and five years ago.