

INSTRUCTION OF INFANTRY.

"In pursuance of my order dated Ems, 4th of July, 1872, I ordain—the report of the generals relative thereto having been laid before me—that the following rules come into use in the instruction of infantry, until further orders:—

"1. When actually under the enemy's fire the employment of battalion columns can only be justified by special circumstances. The normal fighting formation of the first line is therefore to be in company columns. The battalion must, however, under all circumstances be in the hands of their commanders, who command their company columns in the same way as the regimental commander does his battalions.

"2. When the Enemy's fire renders it necessary, the 'trüffen' (bodies of troops) in rear must also assume an appropriate formation, in order to lessen its effects. It may, therefore, be suitable that these 'trüffen,' or certain of them, from wholly or partially in company columns or in line. The companies may also deploy in line, or break off into half 'züge' and sections. At wheelings and alterations of direction of the 'trüffen,' the battalions have, however, as a rule, to assume the formation in columns.

"3. For the formation of the skirmishing line, half 'züge' at least are to be employed at once.

"4. The troops in support may follow the skirmishing line in line or column (in 'züge,' half 'züge,' or sections) and, quite as an exception, also in file.

"5. The attack under certain circumstances, and with due regard to the ground can also be carried out as follows:—After running across a space of fifty to sixty yards the troops throw themselves down, and after a short pause, the advance will be continued in this manner (the advance by rushes). The regulations for the execution of the bayonet attack in line, and in large or smaller columns, remain in force.

"6. A cavalry attack can be received in other than the square formation. The troops will have their attention drawn to the approach of cavalry of the enemy by the signal, 'Look out,' (Achtung!) whereupon the leader will order the formation most suitable to the circumstances."

"7. The distances laid down in sections 114 and 120 of the regulations will be increased in accordance with the object of the exercise to be performed.

"8. Regiments and brigades must be practised in executing precisely movements in accordance with the formations submitted.

"In the above rules the demands of modern fighting have been taken into account. I must, however, impress strongly, that in the instruction of companies, battalions, regiments and brigades, the following sections of the regulations Nos. 43, 88, 98, 99, 112, 113, 114, 115, and 130 have to receive increased attention; so that the multiplicity of fractions, and the development of strong lines of skirmishers, necessitated by the manner of fighting of the present day, do not lead to a disastrous lessening of the tactical combinations. This danger can only be effectually opposed by an intimate knowledge of the fighting formations on the part of the officers, and by a high degree of fighting and fire discipline, combined with a well grounded and strictly executed system of drill (exercir-schule). Although I have to make such increased demands upon the instruction of infantry, I nevertheless accord it some relief; for the practice of some of the

practice of some of the regulations formations will in part be entirely abolished, and in part undergo a modification.

"I therefore ordain that the following be no longer practised:—The counter march (S. 34); column formations by placing the subdivisions one before another (S. 60); deployments upon a rear division (S.S. 94, and 96); movements with the attacking column formed in three ranks; breaking off and forming up the division in the attacking column on the flanks (S. 73); the formation of the skirmishing subdivision in open and closed column (S. 84); and the formation of square in three ranks (S. 89).

"Further—the following are no longer to be made the objects of an inspection:—The formation of subdivision columns to the left (S. 60); and the deployment from the same (93); the marching in file of a battalion (S. 63); breaking off and reforming the attacking column from the head and tail (S. 79); and changing the attacking column into the close or open subdivision column (S. 80).

"The breaking off by companies; and forming the attacking column, as laid down in S. 79, remains as before, an object of practice and inspection. You will cause the above to be further promulgated.

"The War Minister."

(Signed)

WILLIAM.

"The above Royal Cabinet Order is here-with made known to the army.

Signed,

V. KAMECKE.

A translation of the previous Cabinet order referred to above, and dated July 4, 1872, will be found in a pamphlet published some time ago on "Experimental Tactics," by Colonel E. Newlgate.

SPECIALIZATION OF SHIPS OF WAR.

(Translated from the Russian in the *Revue Coloniale et Maritime* for May, 1873.

We now come to the next question: What order should take the place of the old fashioned line of battle?

When we speak of an "order of battle" we must be understood to mean the order in which a fleet should advance to meet another hostile fleet.

The authorities, who have written most recently on the subject of naval tactics, two Austrian naval officers, Lieutenant Weyprecht and Captain Oesterreicher, speaking from impressions formed and experience gained in the combat of Lissa, deny *in toto* that any order whatever can be maintained during a naval engagement in the present day. Probably the majority of officers will coincide in this view.

As to the best order for commencing an action, opinions are divided. We have single and double lines, wedges, parallelograms or naval squares, and double indented lines, but all these subdivisional arrangements are not strictly speaking orders of battle, but rather dispositions of the fleet. Assuming that in certain of the above cases it is necessary that the posting of the several vessels in each sectional position of the fleet should be determined by the peculiar attributes of individual vessels, it will be found that the question has not been touched upon at all by tactical writers. With a fleet subdivided into smaller portions, each forming a sort of tactical unit by itself, it would be of greater importance to ascertain what ships should be combined in each. Should we post together ships possessing, as far as possible, the same qualities—or, should we choose

them so as to supplement each other and afford mutual support? We have as yet been told nothing upon this point: and yet these interior arrangements are of far greater importance than any general plan of formation for the whole fleet.

But the interior arrangements of a fleet in order of battle can only be rendered truly effective by a thorough acquaintance with the special qualities of every vessel in the fleet, and also those of the enemy's ships. Those who have hitherto written on the subject of naval tactics, speaking constantly of ships of war in the abstract and *en masse*, without attempting a more minute examination of the various qualities which constitute the chief value of individual vessels, which have had no motive and no means to enter into these details. Nevertheless, in these very details lies the essence of the naval tactics of the future.

Trammelled by old fashioned habits of regarding naval tactics, M.M. Weyprecht and Oesterreicher have arrived at the conclusion that the science of naval tactics no longer exists. And in regard of vessels with indeterminate qualities, whose principal role is ramming, they are no doubt right. As soon, however, as we begin to recognize distinctions between ships depending on their qualities and armaments, we are led to the consideration of the specific qualities of each class, upon which qualities must depend the method of handling each individual vessel, and its position in the order of battle.

Naval tactics thus presents a wide field of study—a study necessarily involving considerations of *naval strategy*, a science which at present has no existence.

Viewing the matter broadly and considering how confused and entangled are the questions at issue, it appears absolutely necessary that these two branches of science should be fused into one under the head of *maritime warfare*.

With the facilities for manœuvring which the vessels now possess, the sea may be regarded as a vast field of battle, where the outposts of the side remaining on the defensive occupy, the whole length of the latter's coasts.

If then, a direct answer be required to the question: What should now be the order of battle for a fleet or squadron putting to sea with the object of bringing the enemy's fleet to an engagement? we can only formulate the reply thus:—The order of battle will depend absolutely on the descriptions of vessels of which the said fleet or squadron is composed, and also upon the composition of the hostile fleet.

Then comes another question. In engaging an enemy of inferior strength, it is still desirable to close with the latter as far as possible?

This question, which in times past was generally decided in the affirmative, must now in most cases receive a negative reply.

For example, a heavy ironclad attacked by a small armoured ram or torpedo vessel should not only *not* close with her opponents, but should endeavor to keep them as much as possible at a distance. This rule is not without exceptions, as in the case where the ironclad finds herself abreast of the ram when she must use all her endeavors to keep her opponent in such a position. But this is an exceptional instance. In the case of ships forming an unbroken line—including not only rams and torpedo vessels, but large sized armor clad ships, provided with spars and torpedoes as auxiliary weapons—it is impossible to decide at what particular distance it will be most advantageous for any particular ship to engage any particular