

THE MILITARY SYSTEMS OF EUROPE AND AMERICA.

BY LIEUT.-COL. WILLIAM LUDLOW, MILITARY ATTACHÉ TO THE UNITED STATES EMBASSY TO THE COURT OF ST. JAMES'S.

THE nineteenth century has been one of unprecedented intellectual and material development, and its close marks the highest level thus far attained by mankind in physical and mental domination. Its most striking phase, perhaps, is the remarkable condition of military preparation in which stand the ruling nations of the world. Europe, which represents the epitome of modern civilization, is practically an armed camp, and its several hosts stand silent in readiness for the trumpet-call, with nerve and sinew strained to meet the shock of international conflict.

It would seem an extraordinary fact, inexplicable upon ethical grounds, that the outcome of centuries of increasing enlightenment and cultivation, among peoples whose avowed creed is Christianity, should be an elaborate preparation for mutual attack and overthrow by force of arms—but the national revenues are heavily taxed for the support of great armaments, and each new development of art and science, each fresh acquisition of knowledge, every mechanical means of which in any direction the world becomes possessed, is seized upon and utilized to secure the maximum of destructive effect, and improve the facilities for cutting each other's throats in the most expeditious and scientific manner.

Four nations occupy the heart of Europe, viz.: Germany, Austria-Hungary, France, and Italy, three of them nearly equal in area and population, while Italy, with half the area, has about three-fourths the average population. The four are compressed into

close contact, each having in effect a common frontier with two others. Eastward of the group looms the Empire of Russia, whose European possessions alone are nearly three times the combined area of the four, with a population about one-third less. To the northwest lie the British Islands, with a population about equal to that of France, and an area a tenth larger than Italy's, but whose power rests mainly in their great accumulated and industrial wealth and the multiplied channels of trade which connect Great Britain with her numerous and widely distributed colonies and with the world at large.

All these European states have been foes, at one time or other, and whatever the alliances, political and commercial, that have been made from time to time, the ancient animosities have never more than slumbered, ready to awaken at a touch under conditions of nervous tension indicating a very unstable equilibrium.

The military history and successes of Germany have easily made her the war school of Europe, and the scientific development of the military art, to which she is indebted for the overthrow of Austria and France in her later wars, has compelled the others to follow her example and imitate her methods even to the particulars of organization and equipment, though unable probably to rival her in systematic thoroughness of preparation and sustained attention to detail.

The system evolved by Germany and now substantially common to all the continental states is as a whole simple enough, and has for its practical object the conversion, so far as may be, of the entire nation into a military body with the largest amount of training that the finances and other public exigencies will permit.

The controlling principles may be summarized as follows :

1. Liability to service universal, and actual service compulsory at the discretion of the state.
2. The thorough training and maintenance under arms in readiness for immediate service of as large a force as practicable.
3. A secure simplicity and perfection of organization and equipment in every particular, large and small.
4. The formation, as rapidly as may be, of a regular reserve, from which the active ranks can be at once expanded from a peace to a war footing with fully trained men.
5. The formation and partial training of a militia, which, in

the absence of the regular troops, is to occupy garrisons and forts, construct defences, maintain order at home, and supply the waste of war by filling vacancies in the field.

6. The enrolment of every citizen into a force that may be levied *en masse* in case of invasion.

7. Careful study and solution, in advance, of every possible military complication, in order that prompt and concerted action shall follow a declaration of war.

By the law of the land every male citizen is liable to service, no substitution is allowed, and each on attaining 21 years of age must present himself for physical examination and enrolment. Not all are taken. The physically and morally unfit are rejected, the best selected in such number as may be required, and the remainder relegated to a reserve, while still subject to partial drill and instruction.

The standing army proper, composed of the flower of the national youth, requires a service of 7 years, of which 2 or 3 are "with the colors" for thorough instruction and practice in the soldier's trade, and the subsequent 4 or 5 with the "Reserve" where the soldier is permitted to engage in other occupations, although required to keep up his instruction by occasional participation with the active force, and at all times to hold himself in readiness to respond to a summons.

From the regular reserve the soldier passes at the age of 27 to a second reserve, termed in Germany the Landwehr, which is divided into two classes, the first of 5 years' service, the second of 7 years more, or until the soldier reaches the age of 39.

The young men not taken into regular service at the outset are assigned to a species of militia, in which they must serve, for 12 years, with periodic drills, or may join the regular forces as volunteers for purpose of instruction. Back of these several organizations is the great body of untrained or partly trained militia termed in Germany the Landsturm, consisting of every able-bodied man between 17 and 45 not enrolled in the army or reserves. The Landsturm is also divided into classes 1 and 2, according to age, and, as a body, is only to be called into active service in case of invasion.

In order to expedite the training of larger numbers for the regular reserve and thus keep pace with an impending increase in the French Army, the German law of 1893 reduced the period of

service "with the colors" for the infantry from three to two years, so that the successive levies might the more rapidly be passed through the military mill, and the annual supply of about 300,000 youth of 21 be as largely as possible converted into soldiers.

The direct command of the army is vested in the Sovereign, who is personally the Commander-in-Chief, and to whom every man takes oath of unconditional fealty and obedience. The Corps Commanders report direct to and receive their orders from him.

The General Staff works assiduously at collecting information, studying war problems, devising improvements, bettering the administration and directing the instruction of the line officers, who themselves are industriously engaged from morning to night in the drilling, training, and physical and mental education of their men. Endeavor is made to insure the efficiency of the army for every military task and its complete readiness to meet or attack an enemy in any quarter. Plans of campaigns in great variety are worked out and scheduled, and the individual commanders confidentially instructed as to what each is to do, and on announcement of war the German Army can be mobilized, *i. e.*, put in active service, within a week fully equipped.

The general organization and sub-divisions of this force, as representing the result of mature experience and keen study, may be briefly described.

The army is divided into twenty-one separate "corps," each combining a due proportion of all arms, and capable of acting as an independent military unit, which in time of peace occupies its own territorial district, and keeps its ranks supplied from the local annual levies.

A corps consists of: (a) 2 "line divisions"; (b) a horse artillery division of 2 batteries of 6 guns each; (c) a field artillery division of 4 batteries; and (d) a sanitary detachment.

A "line division" consists of: (a) 2 brigades of infantry; (b) a field division of artillery of 4 batteries; (c) a regiment of cavalry; (d) 1 or 2 companies of engineers; and (e) a sanitary detachment.

A "brigade of infantry" consists of 2 regiments: a regiment of 3 battalions; a battalion of 4 companies.

The strength of each company is, on a peace footing, 135 men; in war, 250. A battalion, therefore, represents in peace 540 men,

in war, 1,000. A regiment contains 1,260 and 3,000, and a corps about 16,000 and 30,000.

The four divisions of artillery in each corps constitute an "artillery regiment" of the same numerical designation as that of the corps; and it may be noted that the cavalry is at all times maintained on its full war footing in readiness to take the field at once, in advance of the filling up and mobilization of the war ranks.

The relative proportions of the several arms are about as follows: General staff, staff and non-regimental, miscellaneous, $2\frac{1}{2}$ per cent.; engineers, pioneers, bridge, balloon, railway, and telegraph services, $2\frac{1}{2}$ per cent.; artillery, 14 per cent.; cavalry, 13 per cent.; and infantry, 68 per cent. So that the fighting force of an army of 500,000, including, say, 20,000 officers, would be, in round numbers: Staff and miscellaneous, 12,500; engineers, etc., 12,500; artillery, 68,000; cavalry, 67,000; and infantry, 340,000: with, say, 2,700 guns and 100,000 horses.

The following table gives the area, population, and military strength of each of the six leading European states, with the corresponding data for the United States for comparison:

	Area, sq. m.	Population.	Military Strength.	
			Peace.	War.
Germany.....	208,738	50,000,000	584,548	2,700,000
France.....	204,092	39,000,000	523,755	2,715,570
Austria-Hungary.	261,649	43,500,000	299,150	1,590,820
Italy.....	110,623	31,500,000	247,228	1,909,000
Russia in Europe.....	2,095,000	110,000,000	977,500	2,722,400
Great Britain.....	127,973	40,000,000	*220,509	700,000
U. S. America.....	3,581,000	65,000,000	{ 25,000 112,000	Regulars Militia

*The British peace strength includes 76,721 in India.

Needless to say this maintenance of a swollen military force, ceaseless vigilance, and untiring energy of preparation must be paid for, and roundly. With the exercise of the most rigid economy, short of weakening her equipment, Germany lays out about \$160,000,000 annually for military expenditure on the

army and navy—considerably over one-third her entire revenue. France, a much richer country, but burdened with the hugest load of debt ever known, pays \$180,000,000; and Italy, already crushed under the weight of her public obligations, pays \$80,000,000; Austria-Hungary about the same. Great Britain, with larger resources than any of the others, and relatively isolated from territorial contact, but whose necessity for maintaining her hold on India and the command of the sea for the protection of her commerce, which is more than half the tonnage of the world, compels her to rival the others in military readiness, expends annually \$160,000,000 on her army and navy—about one-third her gross revenue.

It should be noted, however, that Great Britain has not adopted the plan of universal and enforced service, nor, in view of her special requirements, is the organization the same. The English regiments are maintained by voluntary enlistments, and the English Army is practically the training-school and recruiting-depot for the British Army in India, to which annual drafts are sent, and where 77,000 men are maintained in active service, in addition to native contingents numbering 140,000.

To the actual outlay in money by the European states should be added the incidental cost of the withdrawal from profitable occupation and the maintenance in economic idleness of these huge armies of 200,000 to 1,000,000 men at the period of their greatest activity and productive power; and as a man in full vigor of mind and body can hardly be worth less than double the actual cost of supporting him, it will be seen that the annual expenditure may be multiplied by three to reach a total representing the ultimate cost of the military conditions existing in Europe. As a partial offset to this, however, may be set down the influence of this armed strength in the maintenance of internal order and the repression of turbulent elements, which, if permitted to make head, would disturb the peace and might even threaten the stability of the State. It is possible that in some cases at least considerations of this kind, conjoined with the general apprehension of hostile designs on the part of their neighbors, may account for the seeming willingness of the several peoples, through their national legislatures, to endure the continuance of large expenditure for military purposes.

What shall be the history of these armaments remains to be

seen. Whether Europe is to be again convulsed by a combat of giants, which, if it occur, will involve the ruin of some nations and important readjustments affecting all, and creating new and deeper heartburnings,—or whether the armies will eventually be peacefully disbanded in accordance with a developed general conviction that such is the rational and civilized thing to do,—only the future can disclose. The responsible rulers do not hesitate to avow their earnest determination, if possible, to keep the peace, while insisting that the best guarantee of it is complete readiness for war. If the balance can be maintained, and the existing conditions of supersensitiveness do not precipitate a conflict, it seems probable that in time, an enlightened public opinion may control events and solve the problem.

The military strength of the United States as represented by its armed forces is in marked contrast with those of the nations of Europe.

With an area exceeding all of them combined and a civilized population greater than any, contained within its own frontiers; without isolated possessions needing defence, or the policy that would acquire them; creating no enmities, cultivating relations of friendliness with its neighbors on the north and south; with a wealth of resource and military aptitude making it too formidable to be attacked—the situation is one entirely suggestive of peace, and the rapidly increasing population is left free to devote itself to industrial and commercial pursuits, with neither necessity nor justification for the maintenance of an exaggerated armament.

While in no sense quarrelsome or combative, the race has shown itself possessed of a military spirit and capacity which, evoked and dominated by an intelligent and patriotic faith in itself and its future, have always proved equal to the emergency, however grave, and carried its contests to a successful issue.

With the conclusion of the Civil War in 1865 the armies were promptly disbanded and the military establishment put upon that moderate peace footing that appeared at the time to be sufficient.

The main uses for an army then were the occupation of some of the more important points on the seaboard and frontiers, but more particularly of numerous interior points, for the control of the wilder Indian tribes, whose fondness for war, natural fierceness, and reliance upon hunting made them restive under the

gradual enroachments of the white settlers, and caused frequent outbreaks of greater or less seriousness.

By Acts of Congress the enlisted force of the Regular Army is limited to 25,000, and the general organization is substantially as indicated in the following table :

	Officers.	Men.
General officers and General Staff depts.....	391
Corps of engineers.....	121	500
Ordnance Dept.....	58	485
10 regts. of cavalry.....	432	6,050
5 " " artillery.....	280	3,675
25 " " infantry.....	877	12,125
Non-com. staff, unattached men, scouts, etc....	2,165
Totals.....	2,159	25,000

In addition are various enlisted men, general service clerks, and messengers, hospital attendants, etc., not included in the 25,000, numbering about 1,400, and bringing the total enlisted to 26,383, and the aggregate of all ranks to 28,542.

The organization of the several arms is as follows :

A regiment of cavalry consists of 12 "troops," each having three officers and 60 men. At present two troops in each regiment are not filled, retaining only a skeleton organization. A regiment, therefore, now contains 44 officers and 605 men.

A regiment of artillery consists of 12 "batteries"—10 foot and 2 mounted ; each foot battery has 4 officers and 60 men and a mounted battery has 5 officers and 65 men. The regiment, therefore, contains 56 officers and 735 men.

A regiment of infantry consists of 10 "companies," each having 3 officers and 60 men. As in the cavalry, 2 companies in each regiment are skeletons, and the regiment, therefore, contains 36 officers and 485 men.

The engineer battalion is divided into four companies, with three officers each. Two companies have 133 men, one has 132, and one has 100. The battalion therefore contains 16 officers and 500 men.

The ordnance detachment of 485 men is generally distributed at the arsenals and employed as guards.

The general officers of the line are nine in number, three major-generals and six brigadiers—and for the purpose of distribution and command of the troops the country is divided into eight territorial departments, each with a general officer in com-

mand, the senior major-general commanding the army with headquarters at Washington. The troops are stationed all over the country at military posts numbering about 100, leaving some 40 posts, mainly on the Atlantic and Gulf coasts, unoccupied. As the necessity of guarding a large area from Indian outbreaks has disappeared, the troops are by degrees in process of concentration in the vicinity of critical points, which may in general be considered the leading commercial ports and large interior centres of population—but it is evident that, with an effective force not exceeding 22,500, but few garrisons of even 1,000 men can be maintained.

Were it a serious question of resisting attack or of maintaining internal peace, such a force, required to distribute itself over the entire area of the United States, would be manifestly inadequate.

The staff departments proper are 7 in number, with personnel as follows : Adjutant-generals, 17 ; inspector-generals, 7 ; judge-advocate-generals, 8 ; quartermasters, 59 ; subsistence, 26 ; medical, 193 ; and pay, 31.

The duties of these several departments are in general sufficiently indicated by their designations, with the exception, perhaps, of the quartermasters, who have to do not only with barracks, quarters, and grounds, but with a great variety of other matters, including transportation, fuel, forage, clothing, camp and garrison equipage, purchase of public animals, care of national cemeteries, etc.

Each staff department with headquarters at Washington conducts its business independently of the others, under the immediate supervision of its own chief and the general direction of the Secretary of War. A representative of each department is stationed at the headquarters of the territorial departments, who directs the duties of his subordinates at minor points.

In the case of the quartermasters and subsistence departments, each in addition to its own personnel, usually stationed at the more important points, has a representative at every garrison—usually a line officer detailed for both duties.

In all the departments endeavor is made so to regulate and systematize the methods of administration, including reports, returns, and money and property accounting, as to make them effective and easy of comprehension, in order that, should the

employment of a large force become necessary, the organization might be almost indefinitely expanded, without confusion or failure.

The American private soldier enlists for three years, and may re-enlist for corresponding periods while acceptable for service. He receives from \$13 to \$18 per month in addition to his rations, clothing, bedding, housing, and medical attendance; his compensation aggregating considerably more than double that given in the British service.

The total annual cost of the military establishment is about \$37,000,000.

In addition to the Regular Army the United States laws make provision for the organization of a militia, which, generally designated as a National Guard, is the creation of each State, and under the control and regulation of the State authorities, with the governor as its administrative chief, but is subject to be called into the service of the United States at the summons of the President when, in his judgment, such action is necessary.

Each State is supposed to enroll its able-bodied males between the ages of eighteen and forty-five, and according to the Census of 1890 the total of these was some 13,000,000, which, allowing for necessary and proper exemptions, would furnish about 9,000,000 or 10,000,000 as liable to military duty. Of these the actually organized force numbers about 112,000, only a little over one per cent., and not only does the militia of the several States vary in numbers according to population and other considerations, but in still greater degree in the training and efficiency of its individual organizations, from a standard of discipline and drill that approximates to that of regular troops to the veriest travesty of an armed force.

Improvement more or less is annually made, according to the spirit of the community to which they pertain, the energy and loyalty of the officers and the intelligence and interest of the State authorities, but the showing as a whole is not encouraging.

The policy of the Federal Government has been to aid the development of the militia—both by annual appropriations of \$400,000 for the procurement of arms and munitions, and by furthering a greater degree of association between the regular and State forces. For this purpose the two are sometimes conjoined in camps of instruction, regular officers are detailed on the staff

of the governors, and others assigned to inspect and report upon State organizations.

A further service, possibly even more useful, is the detailing of regular officers as military instructors at colleges where the students can be organized as a battalion for drill and instruction and attend lectures on military and cognate subjects, in order that at the age when the deepest and most lasting impressions can be made and the character moulded, a knowledge of and liking for military service can be inculcated. Military training, physical and moral, is valuable *per se*, and it would be well if every citizen could be taught to bear arms and use them scientifically.

The physical development—the all-round training of the body, the habit of self-reliance as well as of combined action, the straightforward set of head and eye and the squareness of shoulder, with which are correlated directness of speech, promptness of action, and integrity of character, self-respect and respect for others, self-restraint and the practice of a becoming obedience to law, respectful demeanor to those above and about one, and consideration and kindness to those below,—these are all military attributes with which every citizen may profitably seek to endow himself, but after all is said and done a man cannot be trained to be a soldier save in the school of actual service. No perfection of drill or manual, be they practised as often as every week, and supplemented by regimental drills, street parades, and even a week every year in a camp of instruction, can accomplish this transformation. Time and the unintermitted habit of years are necessary for the man to absorb that single idea of devotion to duty and to duty alone—to the disregard and sacrifice, if need be, of every other consideration—that constitutes the fundamental characteristic of the soldier, and differentiates him from the armed citizen.

Our people learned this lesson in the arduous work of 1860-4, but that was 30 years ago, and the lesson is in danger of being entirely unknown to the coming generation and that now on the stage. While, therefore, it is desirable that every citizen, so far as may be, without undue interference with his pursuits, business or professional, should be taught a soldier's trade, it cannot be expected that he shall follow it to the extent that is necessary if in all circumstances he is to be found equal to every emergency.

That is the affair of the professional soldier—who makes it his

lifework and knows no other—who, with a mind free from other claim or preoccupation, gives all his time and all his energy, physical, moral, and mental, to the training of himself and of the men for whom he is responsible—in the career which he has chosen, and which admits of no divided sovereignty.

The function of a government, aside from the national defence, is to maintain order, enforce obedience to law, and to safeguard the lives, property, and personal liberties of its citizens—and the great achievement that has been wrought in America under our form of government is the assimilation of a horde of immigrants representing peoples of every race and every shade of moral and social proclivities, into a distinctive American nation, which, following its inherited and instinctive Anglo-Saxon love of justice and insistence on personal rights, has pervaded the entire composite mass with its own convictions, and formed it into a homogeneous and consistently law-abiding community. If there be still found elements not fully digested, and if these have been able to impart to certain classes a mistaken impatience of and resentment against the conservative legal restraints needful for the general order, the reasons may be sought, first, in the indiscriminating welcome given to all—even those escaping from the consequences of criminal attempts and purposes in their own countries—and, secondly, in the superfluous measure of toleration with which such sources of irritation have been treated.

To be worthy of respect a government should be able to command it, and, since preservation of order is the object to be attained, there is needed so much of an organized force at the disposal of the government as should be able not only to restore peace, but to forbid its breach; and a nation that would relegate the maintenance of order to casual and insufficient means puts itself in the attitude of a city that, dispensing with a trained police, should intrust its security to its citizens alone, and presently would find itself at the mercy of the criminal and violent classes.

In a well-ordered community it does not suffice that after an *emeute* lasting for weeks—with direct losses of millions from acts of violence and rapine, and incidental losses of millions more from suspension of wage-earning, interruption of traffic, and interference with commerce, threatening starvation to whole communities and entailing destitution and misery upon thousands—

the national police should finally appear, and, taking stand on the ruins, amid the smoking desolation, command the disappearance of the rioters. It would be better if the ultimate hand of the law were raised at the first open act of defiance, and steadily and silently upheld in the face of impending riot, until the moral effect should have repressed the rising wave of violence, and given time for cooler counsels to prevail.

The United States in less than a century and a half has accomplished marvellous results, and won its way to a leading position among nations, displaying at all times an intelligent adaptation of means to ends that is the outgrowth of the fundamental common-sense of the people.

Nations are but individuals—infancy, manhood, old age, are equally the portion of both. The older nations of Europe are wearing themselves out faster than need be with their hostile and costly armaments, when the wasted revenues might be usefully employed in fostering the national vitality and bettering the condition of the people.

Young America in lusty growth and unexampled development already surpasses them, and has but just begun her race. To her hands is the future empire of the world to be committed. It is not too soon to be learning to handle the reins, and her first essay should be with her own people.

If the law in any of its practical effects shall involve injustice to or unnecessary hardship on any, let it be changed as shall seem best. The one principle that may not be changed is respect for and obedience to law so long as it is law.

This principle is the deepest teaching of the military life, and can best be preserved and expanded by the retention of an adequate military nucleus as a permanent and wisely regulated feature of the national life.

WILLIAM LUDLOW.

SHALL WE HAVE FREE SHIPS ?

BY EDWARD KEMBLE, PRESIDENT OF THE BOSTON CHAMBER OF
COMMERCE.

THE paper which appeared in the REVIEW for April last, under the title of "Our Navigation Laws," was remarkable for what it said and for what it left unsaid. The author is well known, and his words are entitled to consideration because he is well qualified to discuss the subject; but this should be done without prejudice, for it is a national subject.

The question is, Are the laws referred to, on the whole, advantageous to this country and conducive to its commercial growth at the present time ? It can be considered properly, only in the light of experience, and particularly in connection with the present stage of the world's progress in commercial affairs.

The Act of December 31, 1792, forbids American registry to foreign-built ships. The object was undoubtedly to promote shipbuilding and its development in this country. There could have been no other object. This contributor says there was no need of such a law then, and quotes from a paper published in May, 1790, more than two and one-half years before the law was enacted, to sustain his statement. His view, apparently, is that it was enacted, with prophetic vision, for use sixty years later, when it would prevent the English builder from selling the modern steamship to an American buyer.

The art of shipbuilding, so far as can be ascertained, was not firmly established in this country in 1792, and what may be called its development had not yet begun. This law had a purpose then, and it was accomplished and justified by the impetus which the law gave to shipbuilding here, and the great development which followed later. It was soon found that such ships as