THE TRAINING OF THE EFFICIENT SOLDIER

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As long as the conditions now existing remain unchanged, no one can seriously entertain the idea that armed forces for the protection of a nation from foreign aggression or domestic violence can be dispensed with. Until the day arrives when universal peace reigns throughout the world the spectacle of a body of male citizens withdrawn from the peaceful avocations of ordinary life and devoted to the purposes of war must be a common one, for each nation will, until that day comes, maintain such a national police force as will, in the opinion of its responsible leaders, insure respect for its interests both within and beyond its borders.

What that police force shall be, its strength, organization and equipment, depends upon many factors, but, differing as they do with each nation, the laws adopted and the methods deemed best for the purpose constitute its military policy. The military policies of nations differ widely. In some the dangers seem to the rulers so great that only the thorough training of every able-bodied man for war will meet the necessities of the case. This gives rise to a system of training by which every male citizen must pass through the ranks and thus obtain the education deemed necessary for national purposes; such a system withdraws from civil occupation a certain percentage each year of all healthy males, trains them in the arts of war and results in time in making available for national defense or offense the largest possible percentage of the total popu-Other nations, not deeming such an exhaustive process necessary, reduce the requirements of compulsory service by various methods, and others again trust entirely to the patriotism and valor of their men and, requiring no compulsory service, seek to fill their ranks both in times of peace and war by offering inducements of high pay and temporary service. Needless to say the United States belongs to the latter category.

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Whatever the military policy of a country may be in regard to strength and organization, and however much it may differ in these respects from all other countries, it includes in its policy a system of education and training with a view to perfecting the soldier in his duties. Each in the interests of economy seeks to so train a comparatively small body of men that they may be ready to meet an equal or even a superior force with good chances of success. Appreciating that war is sudden and the stroke is liable to be made at the most unexpected time, each strives to maintain a force in the highest possible state of efficiency, in order that it may be prepared on the outbreak of war to strike swiftly or at least resist stubbornly the onslaughts of its enemy, and thus gain time to call forth its reserves and organize its resources.

The military policy of the United States is to maintain as small a standing army as its immediate necessities may call for and to trust to hastily raised levies in time of national danger. Whether this policy arises from the intense absorption of our people in commercial pursuits, our assumed isolation and immunity from interference by other nations, or the unreasonable belief that a standing army constitutes a threat against the liberty of the people, it has resulted in the nation maintaining the smallest army, in proportion to the total population, of any first- or second-class power on the globe. We are a commercial nation and it seems strange to military men that we do not strike a balance on our war books and count the cost of a policy which is so evidently extravagant. Few of our people know how extravagant this policy has been in the past, and it may not be inappropriate here to recall two or three instances in our history which illustrate this point. General Upton in his book on the military policy of the United States, shows that in the War of the Revolution, with an unenterprising enemy, ranging in strength from 30,000 to 42,000, we enlisted a total number of 305,000 men without being able at any time to bring more than 17,000 of them against the enemy, and incurred a debt of \$370,000,000, exclusive of the pensions, or \$440,000,000 including that item. Failing to appreciate this extravagance or to heed the repeated warnings of General Washington, our country in the War of 1812 enlisted the enormous number of 527,000 men to fight a British force which originally was only 5,000 and was never greater than 16,500 regulars, and yet we were never able to bring more than 5,000 of our men against the enemy, and practically failed in all of our undertakings, at a cost of \$245,000,000. In the Florida War we enlisted 60,600 men against a miserable, undisciplined banditti of deluded Indians and fugitive slaves, whose total strength there is reason to believe never exceeded 1,200.

How it happened that with these great numbers of men enlisted we were able to bring so few against the enemy is explained by the fact that the great majority of them were enlisted for very short terms, terms so short that they expired before the men could be trained and brought to the battlefield. The above instances in our history are cited simply as explaining why the War Department has adopted for our army the elaborate system of education and training which will be briefly explained.

The soldier, in the broad sense, includes both officers and men, and no description of the soldier in the ranks would be complete, or indeed comprehensible, without a description of the training of his officers who are his instructors. Our system of training, therefore, starts with the officers and includes the non-commissioned officers and privates down to the farriers and cooks. To meet the requirements our government has adopted and put in operation a scheme of education which is comprehensive in its scope and is, in our opinion, calculated to bring both officers and men to the highest state of efficiency in their profession.

The training of a soldier is easily divisible into two distinct systems; physical training to develop his body so that it may meet the unusual and exceptional strains of warfare, and mental training that he may apply the lessons of experience and bring to bear upon the affairs of war every resource which science can give.

Physical Training.

The physical training of our soldiers is attained by such exercises as experience has shown will develop in them the powers of endurance necessary to resist the hardships and exposures incident to war, combined with constant practice in the minor problems of war to prepare them for the actual conditions which war will bring. Whilst experience has taught us that the nearer we can bring our men to that state of physical development attained by the all-round athlete, the nearer they will be to the ideally trained soldiers, there

are in the army certain peculiar and unusual requirements which are such that the training of the soldier like that of other men for special professions must follow special lines. The soldier must not only bear unusual exposure and fatigue, which indicates the necessity of maintaining the very highest state of general health, but he must be trained for the special work of the arm of the service, be it cavalry, infantry or artillery, to which he belongs; he must have strong legs to be able to march or ride long distances; his hand must be trained to manipulate his weapons, the rifle, sabre, or field gun, with the greatest speed and accuracy; his back must be strengthened to carry heavy burdens for many miles, and his eye trained to see clearly and judge accurately the ranges of objects at great distances over all sorts of ground and in all conditions of weather.

The physical training of the soldier starts with the first days of his enlistment and continues throughout his service. It has for its starting point the "setting up" drill; the course is continued by daily drills under arms, exercises on the horse, practice on the range and in estimating distances, by marches, bivouacs and exercises in the problems of war.

The setting up exercises are based upon the best methods of recognized instructors in athletics, and consist of such movements of the body, legs, arms and hands as will develop those parts, with special exercises in deep breathing to enlarge and develop the chest. These movements are made both with and without weights in the hands, more frequently without weights than with them; in each case the clothing is loosened to give freedom to the muscles, and the exercise is of short duration. The movements without weights are six in number; they are easy and graceful, put no undue strain upon the man, and tend to exercise every muscle in the body. The movements with weights are somewhat similar in character: in them the rifle held in both hands is the weight which is swung from side to side, raised above the head, lowered behind the shoulders and thrust from the chest to right, left or front in time to the cadence of music. The exercise with the rifle serves a double purpose in that it not only develops the muscles but very soon accustoms the man to the weight of his rifle so that it no longer becomes a burden to him.

If these exercises were infrequent or intermittent the results might be small, but as the men, starting from the day they join, are put through them daily, generally just after reveille, the results are in a short time very marked; recruits whose muscles were undeveloped, or developed only in certain directions, become broad-chested. strong-backed, well-muscled men, their whole bearing changes and they are prepared to bear fatigues which would have been impossible without such development. Did the physical training stop here it would meet but part of the requirements. Continued in the daily drills, which not only develop the body of the man but insure that prompt and unquestioned obedience to orders so essential in his profession, by training in the gymnasiums which the government is providing in most of our posts, by long marches, practice in estimating distances over varied ground and by the field athletics to which one day each week is devoted and in which we encourage the men to participate, the soldier becomes, in time, an athlete and applies to his government the health, strength and clear sight he has acquired during service. In this course of physical training his officers are the instructors; they by precept and example attempt at all times to encourage the men in healthy development. What can be accomplished under the system is little known outside the army. Truly wonderful marches for infantry and rides for cavalry have been made, the history of which must be sought for in the accounts of the army's service against our western Indians and in the jungles of the Philippines.

By the process so briefly and inadequately described above we endeavor to produce a strong, healthy man fit for the purposes of war; to make him skillful in the affairs of war we, after constant practice with his weapons on the range, instruct him in such operations of war as will in all probability fall to his share. This course. however important it may be, can only briefly be touched upon. The range, accuracy and volume of modern weapons are such that only with the greatest difficulty can soldiers in the attack be brought to the point on the field of battle from which they can deliver the final assault which will bring victory. When it is stated that artillery can be so massed and infantry fire so directed that every square foot of ground within limited areas can be struck by a bullet ten times each minute, and that this is possible up to two and three miles, the difficulties of passing through such a fire-swept zone become apparent. Fortunately such a condition is rare, yet soldiers have fought in the past and will in the future fight under such conditions. To prepare them to do so and to meet the current events

of military life during war they are constantly exercised on the ground under conditions as nearly like those of actual war as can be obtained. To pass over fire-swept zones, that is to advance to the attack, the soldier must be skilled in utilizing the cover afforded by inequalities of the ground, he must be prepared to cover himself with intrenchments, and he must learn by drill how to quickly take those formations and execute those manœuvres which will bring him hand-to-hand with his enemy. This part of his education is conducted through field exercises in which tactical problems are solved, with troops or bodies of men opposed to each other. Such exercises can be varied indefinitely. They include not only methods of approaching for the attack, but methods of defense, construction of obstructions, selection and preparation of lines for defense, construction of bridges with such materials as may be at hand, building of telegraph and telephone lines, and a thousand and one things which in civil life are done by specially trained experts.

Mental Training.

As the mental training of an army depends primarily upon the training given the officers, it is deemed best to describe the part of our system which applies to officers rather than to go into details as to how this mental training is transmitted to the men, therefore, only such brief reference will be made to the schools for soldiers as will be necessary for an understanding of the breadth of the general educational scheme of our army.

For the mental training of its officers our government has provided a chain of schools of technical character in which the scope of instruction extends from preliminary instruction appropriate to all arms of the service, through special courses appropriate to each special arm, to staff instruction and ends at the war college.

At the foundation of our military instruction stands the great Military Academy at West Point where young men, drawn from civil life, spend four years of the hardest kind of study and endure a severity of discipline unknown in other institutions. Here we find the standard of efficiency upon which our government has set its seal. Though other avenues to commissioned rank have been opened by the government, the West Point standard is the one recognized standard for officers at the beginning of their service, and it is to-

ward that standard we continually look. The young man who joins the army as a commissioned officer, whether from West Point, from civil life, or from the ranks, at once finds himself confronted with an educational course, part of which he must take and part of which he may take. This course is included in the garrison schools, the special service schools, the staff college and the war college.

The garrison schools are intended to insure and test the military education of all officers in the most important branches of the profession of arms.

The special service schools afford instruction in technical matters relating to the service for which they are established.

The staff college takes selected men from other schools and prepares them for the higher command.

The war college, selecting men of marked ability from the army at large, devotes its course to the working out of military problems upon the solution of which may depend the success or failure of the nation in war.

It will be seen that the course is a progressive one. All officers must attend and pass successfully the course prescribed for the garrison schools. Many must attend the special service schools and from them many, with other selected officers, pass through the staff and war colleges.

Each in its own sphere is intensely practical as becomes our American trend of mind. No course in theoretical training is considered complete until the student has demonstrated his ability to apply the principles taught to actual conditions of war as nearly as they can be simulated in time of peace.

For educational purposes the year is divided into two parts; in the winter, when inclement weather at most of our posts precludes exercises in the field, the theoretical course is taken up; in the spring, summer and autumn the time is devoted to practical work in the field.

Garrison Schools.

At every post in the United States and its possessions the garrison schools open on the first day of November and continue in session until the first day of April. In these schools the field officers and captains of highest rank and greatest experience are the instructors and all officers of less than ten years' service are the pupils.

The number of subjects to be studied is so great that the course has to be spread over three years, one-third being covered each year and three hours each day being devoted to recitations. The course in each subject concludes with a written examination conducted by a board of older officers to test the student's proficiency. The questions for these examinations, in order that the test for proficiency may be uniform throughout the army, are prepared and sent out by the general staff of the army and are not left to local boards. At the conclusion of each examination all papers are carefully marked and any officer who fails to attain a mark of proficiency must, after having his failure recorded on his efficiency report, again take the subject in which he has failed.

It would take too much time to read a complete list of the subjects covered in these schools. An officer to complete his course and graduate from them must be proficient not only in the theoretical principles, as already stated, but in the practical application of those principles to the affairs of military life. For the very foundation of our system of military education is that theoretical knowledge must always be demonstrated by practice under the nearest approach possible to the conditions of war.

It will be seen that an officer in this course must take three years and in case of failure to pass in one or more subjects may take four or five years to graduate. When graduated he is expected to be proficient in the general duties of his profession and to have laid the foundation upon which to build his reputation for efficiency in the army.

Special Service Schools.

Whilst the course in the garrison schools is general, the service schools which follow next in the course of military education are, as the name indicates, schools where the officers of the different arms of the service prepare themselves in the higher studies applicable to their branches of the army. All officers cannot be spared from their ordinary duties with troops to attend these schools, hence those designated to attend them are selected from the most promising officers who have passed highest in their studies and shown greatest proficiency in the garrison schools. The instructors are carefully selected officers from the branch of the service to which the school belongs. The course occupies one year, with

daily recitations and exercises which occupy from five to eight hours each day.

There are seven such schools:

The Artillery School at Fortress Monroe, conducted for the special instruction of artillery officers.

The School of Application for Cavalry and Field Artillery at Fort Riley, Kans., for the instruction of officers in the special duties and functions of those arms.

The Infantry and Cavalry School at Fort Leavenworth, for the special training of the officers of those branches of the service.

The School of Submarine Defense at Fort Totten, N. Y., for the instruction of officers in the special duties of protecting our harbors against attack by hostile fleets.

The Army Medical School at Washington where young surgeons entering the army receive instruction in the duties of their profession as applied to war and the military service.

The Signal School at Fort Leavenworth for signal officers, where the use of balloons, the construction of military telegraph and telephone lines, wireless and submarine cable communication are taught; and finally,

The Engineer School of Application at Washington Barracks, D. C., for the special training of engineer officers.

From all these schools, excepting the torpedo and medical schools, a number of the brightest and most promising young officers are selected for the

Staff College.

At this college the student officers are in great part relieved from recitations; their work consists principally of research; the reading of military history, works upon strategy, grand tactics and logistics, and instruction is conveyed by lectures, discussions and debates between the students and the instructors and involves a broader and higher knowledge of the art or science of war than is taught in the other schools.

Capping the educational edifice of military instruction we have the Army War College, where specially selected officers of the general staff, themselves specially selected men from the army at large, conduct courses of original research touching the great military problems of the country. The details of the course need not be dwelt upon; it is sufficient to say that the War College follows the best known methods and cannot fail in time to produce most satisfactory results.

Probably no method is calculated to give so good an idea of the importance in which that military education and training which produces the efficient soldier is held in our country as to sum up the amount of time which the War Department has assigned to it. To complete the educational course laid down an officer studies four years at West Point, three years in the garrison schools, one year in the service school of his branch, another at the staff college, and finally one, at least, at the War College, making a total of ten years. Even at the close of this course he finds he must, yearly, until he nears retirement at sixty-four years of age, solve problems in the art of war and keep himself abreast of his profession by constant reading.

We believe that the system adopted for the training of officers is equal to any, if it is not the best, in the world. Sufficient has been said of it to show that it takes a great deal of time and a great deal of study.

The time we can devote to officers is of course limited only by their active life, for in our service an officer is commissioned for life. Had we equal opportunities to educate and train our men we would have the best army in the world. Unfortunately the restless spirit of the American soldier and his desire for constant change of occupation, as well as his dislike for restraint, gives us but a short period within which to train and perfect him in his profession. Most of our men remain in service not longer than three years. Within that time the government endeavors to train him for a double purpose; first for his duties in war, and second for his return to civil life with a perfected physique and a mind cultivated with a high sense of patriotism and honor. For this the machinery is provided in the following schools for enlisted men.

The Post School.

In each post occupied by the men of our army there are maintained post schools for the exclusive benefit of the soldier. These schools are not for the purpose of imparting purely military knowledge; they are intended to afford opportunities for study in the sub-

jects taught in the public schools of the country and to make up for any deficiencies in the general secular education of the men. Attendance is not compulsory in the case of men already well taught; indeed only those men whose education has been neglected and who are markedly deficient are compelled to go to them for instruction. Such men are few in number in our service as certain educational qualifications are required before enlistment, and as a rule only men of quite fair education are taken in. Hence the services of teachers in the post schools are required for men who voluntarily seek in them an improvement in their general education. Many men seek this improvement from a desire to compete for positions as non-commissioned or even for commissioned officers, for the latter of which annual examinations are held which are open to meritorious and intelligent soldiers. For such men superior instruction is necessary and the school teachers are, as a rule, men of high intelligence.

The real school of the soldier, where he is trained in military These schools efficiency, is the non-commissioned officers' school. exist in every company, troop and battery throughout our service. In them the company commander, that is the captain, assisted by his lieutenants, is the instructor. Himself a man of experience and well taught in his profession, he is eminently fitted for this work. Being directly responsible for the efficiency of his company in all its work he spends much time and care upon the school. In it is taught everything that goes to make up the skillful soldier; how to conduct all operations of war within his scope, his drill, guard duties, the care of his own health and of that of the men associated with him. Very little control is exercised by the older officers in these schools, and beyond fixing the general character of the instruction and allotting the time from other duties, they have nothing to do with them. They are the captains' schools for their men and the captains may adopt any methods they see fit or deem wise in their instruction. Generally little is done by recitations; lectures, descriptions and discussions of the various problems of a soldier's life form the greater part of the instruction, which is only carried to such an extent as will enable the men to execute such problems with intelligent under-Inasmuch as all theoretical instruction is followed as soon as possible by practical work in the same subject, progress is rapid. In addition to these two classes of schools for enlisted men there are others similar to the service schools for the officers: schools for farriers and blacksmiths, schools for cooking, schools for baking. and many others which need not be dwelt upon.

From what has been said it will be seen that the educational scheme of our army, the plan prepared for the training of the efficient soldier, extends from the highest officer to the newly enlisted recruit. Every officer in the service, excepting a few of the older men whose time cannot be spared from administrative work, is constantly employed. Everywhere superior facilities for education are available, and we are striving in every way to make good our deficiencies in numbers by superior training.

It is evident from what has been said that our military men take their profession seriously. They deem it unwise to trust the lives of their men and the welfare of their country to untrained and uneducated officers. They do not share the prevalent belief of our countrymen that the hour will bring the man, and that under the hail of shot and in the thunder of battle a genius will arise who, by inspiration, will bring victory out of chaos. Appreciating their responsibility these officers are striving to give to their country the most efficient army of its size in the world.