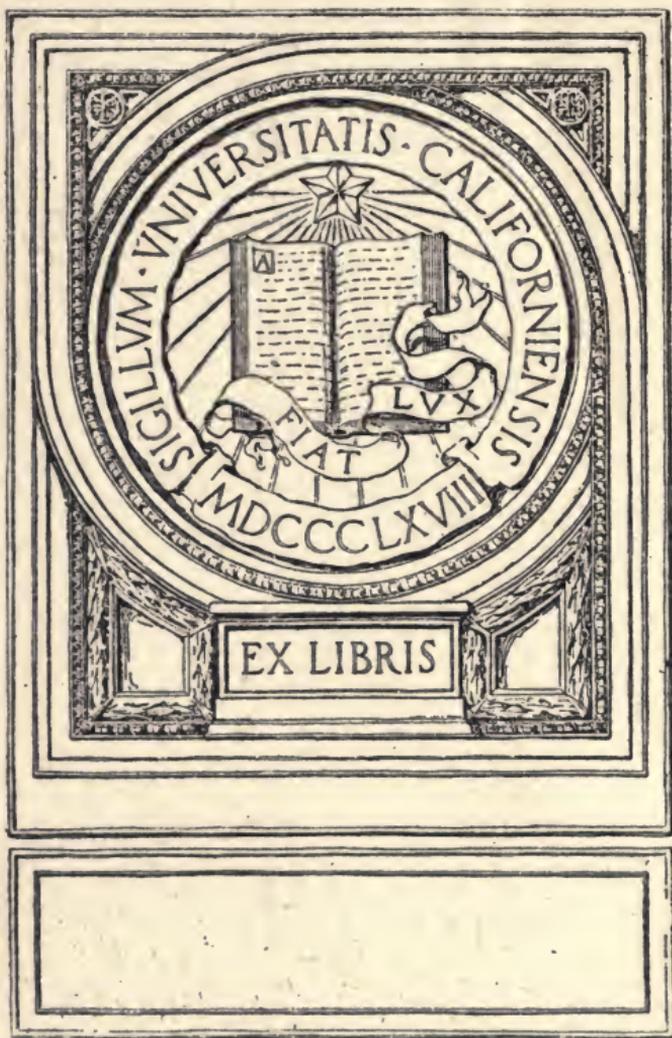


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The Psychology of Handling Men in the Army

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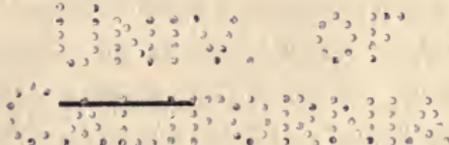
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The manuscript of this book was submitted to the War Department and permission for its publication for distribution among Army officers and soldiers was obtained under date of May 14, 1918. The authors, however are solely responsible both for the general subject matter and for the specific content of the book.



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C. E. P.

PREFACE

This little book is not to be regarded as a treatise on psychology; its purpose is frankly a practical one, and the plan out of which the work has grown originated in the army camps. The experience of the junior author (Lieut. David) in different training camps in which men are being prepared for the various duties of warfare led him to see the need, as he interpreted the situation, of a simple, rather practical presentation of the underlying psychological principles of handling men, one which should be especially designed to aid the newly commissioned and the non-commissioned officer. Consultation with various experienced army officers and a number of prominent citizens strengthened his conviction that a little book of this kind would render very real service in the present crisis, which has forced war upon us on so large a scale that officers must be prepared for their important duties in a comparatively short length of time.

The field covered has been defined in general by what we have regarded as of most practical importance in view of present conditions. Since this is the first book of which we know that deals entirely with the psychological aspects of the training and handling of men in the army, it is necessarily incomplete and tentative in many respects, but it was thought best to begin with the more general and probably the most important aspects of the subject and to leave for later special studies and developments the problems relating to various particular phases of the field, most of which will have to be worked out under experimental conditions for which special provision is necessary.

The book is not a mere theoretical discussion based on certain established psychological principles useful to

the trainer and leader of men, but it has been given shape and direction largely by the actual experiences of a considerable number of army officers who have kindly aided us in various ways, experiences in some cases extending over a period of more than twenty years. The general plan has been to have each chapter, with a few exceptions, made up of three parts: the first by the junior author, an army officer, in a popular and somewhat personal style, to influence the young officers in the principles to be discussed; the second by the senior author on the psychological bases of the subject considered, this to constitute the main part of the chapter; and part three to embody phases of more immediate application and also quotations, experiences and opinions of army officers which would be useful to those persons for whom the book is especially prepared. Some of the chapters, however, consist of only two parts.

In putting out this work we have been guided by the conviction, strengthened by many aspects of the present world conflict, that the psychological aspect of war is far more important than it is usually supposed to be. It is hoped that the book may be serviceable and suggestive in the training and in the handling of men, and that it may prove to be useful and stimulating to various army men not included in the class for which it has been especially prepared. To this end we shall welcome most cordially further suggestions and specific criticisms on any part of the work, which may be of value toward making later editions more useful. Communications on such matters should be addressed to the senior author, and they will receive most careful consideration.

Finally, without in any way making others than ourselves responsible for shortcomings or errors in the chapters that follow, we wish to express our hearty appreciation to the War Department for detailing Lieut. David to the University of Minnesota for thirty days to

co-operate in this work; and to the following officers, who directly or indirectly gave us valuable assistance at a time and under conditions that drained heavily on their own energy:

Major General George Bell, Jr.

Brigadier Generals S. M. Foote and Robert N. Getty.

Colonel H. B. Crosby.

Lieutenant Colonel Chas. E. Kilbourne.

Majors W. C. Baker and E. S. Adams.

Captain S. Y. Britt, Professor of Military Science and Tactics in the University of Minnesota.

First Lieutenants John Ayotte, Thomas G. Bond, James T. Brazlton and James E. Allison.

JOSEPH PETERSON.

QUENTIN J. DAVID.

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The Psychology of Handling Men in the Army

CHAPTER I

INTRODUCTION

I

The big world game before the war was commerce and in this game the United States led the way in many respects. She has been the life of the "party", as it were, among the nations of the world. Her gigantic commercial enterprises and organizations have evoked the interest and admiration of all foreign nations. However, her success in business has been measured by the individual successes of a few captains of industry. The point is that we have all worked and built to satisfy our individual needs and desires. There has been no general plan, no uniformity, no element in our commercial efforts that tended towards national unity; and great manufacturing plants, efficient railroads, vast stretches of cultivated lands do not make a great nation. A nation's strength, other things equal, is in direct proportion to the degree of co-operation among its people, and that nation is the strongest, and can stand the severest tests which has the greatest amount of teamplay.

Popular opinion labored at first under the delusion that we can transform over night, as it were, our accomplishments of yesterday into the sinews of warfare, and this opinion was strengthened to a great extent by our physical accomplishments since entering the war. People pointed with no small degree of confidence and pride to our millions of able-bodied young men in the draft,

whom they supposed we could readily equip for actual warfare against the well-disciplined German soldiers. But the leaders among military men agree, and past history and the present European struggle have proved, that while nations can command men and arms and can purchase munition plants, the most important factors in a successful army—spirit and discipline—can not be handed to an army like some concrete thing, but must be developed through efficient and long training.

Major General George Bell, Jr., in a valued letter* to the senior author, emphasizes the importance and necessity of thorough and efficient training of the men of the army, in the following words: "In the first place, men must be impressed with the fact that the safety of national existence is dependent to a large measure upon the military and naval forces being able to maintain that existence against external attack. For a military and naval force to be efficient, it must be so organized and disciplined that it can be handled by its commander exactly as he desires, in conformity with the general plan of the campaign. This means that each individual must respond instantaneously to orders. Such a response can only be obtained where men *instantly and willingly* surrender their personal inclinations for the welfare of the organization to which they belong, the Army and the Government. This is the fundamental form of discipline. Men do not realize until they have actually fought, the imperative necessity of instantaneous, willing and thorough discipline. A recent example of this truth is to be found in the Canadian forces which, through their lack of discipline, suffered totally unnecessary losses—losses so great that they quickly awoke to the realization of the necessity for discipline, with the result that today Canadians are quite as well trained, or disciplined, as any other part of the British army."

*Dated Feb. 8, 1918.

While the people of the nation at first had their interest centered upon the kind and the number of rifles, machine guns, etc., that our army is equipped with, and the spotlight of the newspaper publicity played steadily upon this feature of our preparations (matters important enough in themselves), comparatively little was said about the training our men are receiving. As a matter of fact the men who are drafted into the United States army are receiving good training considering the shortness of the time available. However, the present crisis necessitates not only good training, but, on account of the importance of the time element, the taking of every possible step to expedite training under our present system. Military men early pointed out the peril of a lack of training. We were handicapped at the beginning by reason of the fact that our citizens have not had the years of training and discipline that those of Germany, France, and other European nations receive. Today millions of our citizens are leaving the office, the bench, the farm and the factory to take up the pursuit of warfare. The process is not only a great transition that changes the men's modes of living, their habits and even their point of view, but it must also be a sudden transition; they must quickly take on their new duties if our armies are to arrive in time to bolster up weakened France, and perhaps take over the brunt of the war.

The men who are entering the army today are different as a class from those who compose the bulk of the army in peace times. In times of peace our army has not as a rule attracted the most energetic, resourceful young men into its ranks, excepting, of course, the commissioned personnel. On the other hand, the best manhood of the nation is being drafted into our present armies; that is to say, the native ability of men now entering the army is of a higher type than we have had in peace times. This fact and the increased demands for

expediting the process of training make it necessary that additional attention be directed to the methods of training, both to save as much time as possible in safety, and also to take into account the individualities of the men entering the army from all walks of life.

The problem the War Department has faced since our entrance into this war has been and will be that of teaching the drafted men the greatest possible amount of soldiering within the short period of possibly six months. Not only will the lives of the men themselves depend to a considerable extent upon the training they receive, but the outcome of this war will probably be determined by the relative efficiency of the armies involved. So it becomes incumbent upon the directors of military training to leave no stone unturned in their search for those methods and means in military training which will produce the quickest and most efficient results. These results can probably be obtained in actual practice not so much by radical changes in the general system of training as by speeding up and making more efficient the present methods. At any rate the War Department has called upon European officers of experience in the present war to assist in the instruction of modern warfare methods, and there is every assurance that our soldiers will be trained in the latest improvements of the game. Our particular problem here has, of course, nothing to do with suggesting what sort of training is to be given and what implements of war are to be used; it narrows down to a speeding up process, to that of how to get the best results in the things to be learned and in the discipline to be given the men, in the shortest possible time. The greatest efficiency of all the men is the ideal for which we are striving; in many respects it is of more importance than the question of how to get the greatest number into the service, though the two problems are supplementary rather than opposing considerations.

Two important considerations for those who train the recruits and who lead the men in actual warfare relate to the extreme individual differences of the men drafted from all walks of life, with various kinds of training and ideals, and to the utilizing of the natural instincts in the men for the attainments of their best effort. It is common knowledge among military men that the students of the officers' reserve training camps learned practically as much in three months as the average enlisted man has learned in the course of a year or two during peace times. This difference is to be accounted for by the high rewards held out to the former class of men, by the fact that these student officers were mostly all college men and were apt pupils and by the efficient system of intensified training evolved for them. The training of the men who will make up our national army has not all these advantages. In the officers' reserve training camps the West Point system of sink or swim was used in a measure and the rewards were high enough to arouse the keenest competition.

It would be a mistake to assume that all the drafted men will arrive at our training stations brimming over with enthusiasm and a desire to learn everything possible about the new work. On the contrary, a considerable percentage of these men have claimed exemption, and they will probably, at first, have only a passive interest in their work at the best, characterized by an attitude of resignation. One can see how important it is, therefore, that at the beginning the officer should develop in the new recruit the right mental attitude. It is necessary for our national safety and for the safety of the individual soldiers themselves that he change this lukewarm attitude into active interest and a keen desire to become as efficient as possible in the great struggle before the nation. In bringing about this transformation in the recruit every just appeal to natural or instinctive

dispositions and every means of utilizing the psychological principles of learning should be brought into play. The young American of today is doubtless just as willing to "do and die" for his country as were those of former years whom we commemorate in song and story, but the situation is more complex now, and the appeal to instincts of self-preservation is not so direct as formerly, even though the danger to national and common welfare is probably greater. When the situation is properly presented the well disciplined American soldier will just as immediately surrender himself to the commands of his leader without demanding reasons why as did any soldier of an autocratic system that suppressed individuality, and he will show far greater efficiency and resourcefulness and judgment within his proper limits. An intelligent co-operative attitude on the part of the soldier and of the officer, with thorough training in the war game, is one of our main assurances of success in the present crisis. How to bring this attitude about and how to secure this training in the short time available is largely a problem of how to manipulate human nature or how to handle men.

II

Nature has provided well for the life of each normal individual. All the vital processes looking after digestion, circulation, breathing, oxidation, and so on, are made to go on automatically, one part of this whole vegetative system stimulating others and in turn being stimulated by them. These life processes are put wholly beyond our voluntary control. A person may hold his breath a short time, but soon the stimulus to breathe becomes so intense as to overcome his efforts. If he should become unconscious the mechanism would run itself and revive him. Nature could not trust us so directly with the preservation of our lives, so she has provided innate mechanisms to do all these things for us.

But this is not all. If something threatens the eye it winks immediately; if a foreign body gets into the trachea we cough automatically or reflexly; if irritated in the nostrils we sneeze; if confronted by some great danger we instinctively have impulses to flee. Obstruction to our movements and our purposes angers us and we resist even to the point of fighting if necessary. When food is withheld from a man a short time his thoughts dwell more and more on food and the means of obtaining it, and he finally gets desperate and will do almost anything in his power and run all kinds of risk to get food. Stimulation for such food-getting thoughts and acts come from the changes within the organism itself.

All these acts go on as naturally as water goes down the gutter, and can be predicted with a high degree of accuracy when the individual and the circumstances are known. If they are not interrupted they run smoothly and mechanically in the main; but interfere with any of them, and they surge over their bounds, as does the stream, and take the next course open to them.

Usually these and other instinctive acts are pleasurable, and intense emotion frequently arises on their obstruction, such as fear and rage. It has often been held that our conscious acts seek pleasure or avoid pain and that the aim in life is to get the greatest amount of pleasure possible. This is now generally known to be wrong in the main. The error of the view becomes most obvious from a careful study of certain conscious reflexes and important instincts. Who sneezes or falls in love for the pleasure of it? The young man falls in love with the beautiful maiden because he cannot help it under the circumstances, and gradually the universe comes to revolve for him about the object of his affection. Many rationally directed acts result, preparing for the comfort of the family; but these come rather as a secondary consideration and must be done because of the general

circumstances brought about, whether pleasant or otherwise. Reflective thought is by no means master of the human machine. A good sneeze is surely pleasurable, but the act is not done *to get pleasure*; it simply *must* take place when the conditions for stimulating it are fulfilled. Recently a magazine story reported that a French scout when right under the enemy's parapet was seized with an irresistible impulse to sneeze. To sneeze there would almost certainly mean death, so he took advantage of the situation the best he could; taking the enemy by surprise he sneezed and attacked before anyone could get ready for defense—and got off victorious! *The sneeze, however, had to come.* True or false, this in miniature is the way nature works in us. Given the appropriate stimuli, the innate tendencies must express themselves. In complex situations, however, and under the effects of training, inhibitions may be effectual or the impulse may be directed into other channels.

Man has at birth, or expressing themselves later in life, an abundance of innate tendencies, which in general we may call instincts; they are clasping, sucking, carrying things to the mouth, crying, laughing, sleeping, specific methods of locomotion, playing, vocalization, sociability and shyness, rivalry or emulation, pugnacity, gregariousness (tendencies to stay with the 'herd' and to feel uncomfortable and excitable when alone), sympathy, flight and fear, curiosity, repulsion, acquisitiveness, constructiveness, secretiveness, sexual love, care of offspring, and others. These are mostly taken from James' *Principles of Psychology*, Vol. II, to which the interested reader is referred for a rather popular and brilliant account of their respective rôles in our lives. A good discussion of instincts as basic to our entire conduct and thought is also found in McDougall's *Social Psychology*.

We are so constructed by nature that under given

conditions we must act in certain ways for our general protection and welfare and for the perpetuation of the species. These conditions are of two general kinds: first, inherited structure, involving such things as connections among nerves, muscles, and glands; and appropriate stimuli, which may be either from objects and circumstances outside the body or from such inner conditions as hunger, fatigue products, secretions of glands, and possibly accumulation of excess stored energy. The perfection of some of these instinctive mechanisms, such as the nerve connections, is often delayed so that the particular instincts cannot be aroused at birth, and in some cases of plastic animals like man a great deal of practice must take place before the acts can be aroused most effectively; but in all cases of persistent activity of any sort, however indefinite and abortive, it is not difficult to find some sort of instinctive motivation.

The conditions of stimulation are frequently such as to call out simultaneously different and even opposing instincts. Such conditions may, on superficial examination, seem to contradict our statement, that the act must take place when the appropriate stimulation of certain inherited structure occurs, but further analysis of any such doubtful case will probably show that the act is delayed or somewhat modified. It may be inhibited or suppressed so that no obvious external response takes place, but inner conflicts will result which may take on a highly emotional tone and greatly modify one's behavior subsequently. If a person's environment could be completely controlled, he could, doubtless, with a proper understanding of his nature, be played upon like a musical instrument and made to conform to one's wishes. Even such acts as are involved in hunting trips, in doing one's professional work, writing books, painting pictures, etc., are probably

more nearly dominated by rather immediate instinctive impulses than most of us realize. We do them because under the circumstances of our training and present habits and innate dispositions they are the most natural things for us to do. Others are doing these things and calling our attention to them, and our own predispositions to do them are set off both by the circumstances of seeing them done by others and by the attention other people get who do them well. The doing of these things "appeals to us" and rivalry spurs us on when once we get well started.

In the history of life in the world only those organisms have survived to reproduce their kind which have had the appropriate instincts to carry on the life processes and to save themselves from threatening dangers, such as attack from enemies seeking to use them for food. In later generations the individual born into the world is therefore the descendant only of the organisms best fitted by their innate mechanisms for life's struggles. The more poorly adapted organisms in every generation fail to meet the exigencies of life and so they do not live to reproduce their own kind. Thus advantageous predispositions to certain kinds of defensive acts accumulate in successive generations. It is these predispositions to act in certain ways, to be interested in certain things and conditions, and to experience certain feelings and emotions under given conditions that we know as instincts.

Instincts are more stereotyped in insects and in certain other lower forms having so short a life that they are not forced to meet changing conditions of climate and of food supply. Fish have very definite instincts, and they are usually hard to change, because of the uniformity in temperature of their environmental conditions, the water. Such animals adapt themselves to new conditions very slowly. The writer has three gold

fish, for instance, which for over a year of observation have retained the instinct of quickly darting down into the water whenever they take their (floating) food from the surface. This instinct is, of course, useful in nature to protect them from fish-eating birds. As James has said of such animals, "Nature, in them, has left matters in this rough way, and made them act *always* in the manner which would be *oftenest* right."

In higher and longer-lived animals there is much more adaptability of instincts, because such animals have to live through different seasons and must therefore accommodate themselves to important changes in temperature and food supply. Instincts in such cases necessarily become greatly modified by habits and often the acts thus modified take on the appearance of a high degree of intelligence. Thus we may greatly overestimate the intelligence of certain animals and fail to see the real motivating instincts underlying the acts. Likewise, we are too apt to interpret our own conscious acts as rationally motivated and directed, when many of them are only the results of unreflective adaptation of instincts.

Yet how little we really think of these things! Man passes himself off as primarily a reasoning animal, but how seldom he actually reasons! The complexities of the environment bring about modifications of the innate dispositions, or instincts, and habits give shape and uniformity to conduct. Thus, for example, our instinct to get food becomes specialized into habits that take us mechanically to our tables or restaurants at specified hours. The whole thing goes off so smoothly and regularly that the underlying original instinct, the inner stimulations to activity in hunger, is lost sight of in the routine habits. But just let anything interfere for a time with these mechanical habits, with the habitual satisfaction of the instinct, and it soon shows itself most

powerfully. So with most of the other instincts. In fact, it is now getting to be recognized that all reasoning processes and habit formation grow out of the failure of original instinctive reflexes and acts to meet the bodily needs under changed conditions of environment. Habit and thought are motivated by instinctive and organic needs. As one psychologist puts it, "Habits are formed only in the service of the instincts." A little observation of our thinking will soon convince anyone that our thoughts are concerned about things *to do*. Instinctive and habitual acts need no thought so long as they do not meet obstruction or conflict among themselves, but when changed conditions demand readjustment, we are forced to think our way out of the difficulties or to adjust ourselves by a random trial and error process such as will be described in a later chapter. Man reasons best under the spur of necessity or of competition, provided, however, the dangers or the exciting conditions are not so great as to bring about excessive emotional disturbances. Scientific institutions attempt to make these conditions for rational activity most favorable. Under great emotional disturbances man frequently acts like a wild beast. To prevent this a good deal of training under such conditions, or conditions similar to them, must be given. *but they can be through learning*

What a dry, hollow, uninteresting world this would be if our instincts were all annulled! All ambition and self-pride would be snuffed out at once. No one would care for anything; wealth, home, country, friends,—all these would become neutral in a moment. Life would come to a standstill; reasoning processes would end as well at one stage, right or wrong (but there would be no right or wrong!), as at another. *Instincts must be the basis of all appeals, of all stimulation to effort, to ambition, to sacrifice, and to loyalty.* Leadership, diplomacy, the ability to inspire men to superhuman effort,

and greatest of all, the faculty of making friends and of enjoying the world with them,—these are the results of proper appeals to instincts. Great business enterprises now attempt scientifically to study types of appeals to human nature in advertising; they find that it pays. The same thing is obviously true of training men for, and leading them to victory over a nation's enemies. Many successful military leaders in democratic countries now recognize this fact. Handling men is stimulating instincts in a thousand and one more or less subtle ways. •

Of course, one does not absolutely need to have a scientific knowledge of instincts to be a successful manager and leader of men. Some men are naturally leaders; leadership is an art. That genius is innate, to a large extent, is usually admitted, but knowledge and training add efficiency to whatever nature or endowment may have done for one. If haphazard experience counts toward success, then surely scientifically directed efforts will not fall to the ground unrewarded. We do not need for the present purpose a lengthy discussion of all the specific instincts, but some of those instincts of special importance to the army officer will be given particular attention in subsequent chapters, both as to their nature and their applications in warfare. We need only call attention here to a few additional matters of practical value which follow from the conception of instinct that we have developed, the conception that instinct is the driving force, so to speak, in our lives.

III

In the handling of men it is well to take toward them the attitude of practical determinism. This means that to the extent that we know any individual as to his innate and acquired tendencies and the circumstances that stimulate him, directly and indirectly, we can predict what he will do in any particular situation. The good

leader is the individual who knows or proceeds to find out a good deal of what these innate and acquired tendencies are in a practical way, that is, what men will probably do under given circumstances, and who then controls the circumstances in such a manner as to bring out the kind of acts desired. He studies individual differences and knows how to stimulate each one to get the best that is in him. Enthusiasm, courage, individual initiative, skill and efficiency in the handling of the instruments of war,—these desirable traits, and many others that the leader trains his men to have, all come about as naturally under certain conditions, and fail to show themselves under others, as water boils when sufficient heat has been applied. Law reigns in the realm of our behavior or conduct as truly as it does in the physical world, but the former phenomena, and life processes generally, are more complex than are many of the ordinary physical changes about us so that their uniformities are often overlooked. Certainly we can predict the acts of a well known moral man about as well as we can foretell the weather conditions.

In all the industries it is being shown by some of the best leaders that a thorough interest in the lives of their men and a knowledge of their individual traits lead to better co-operation and efficiency. Laudable attempts are being made to provide attractive environment with opportunities of recreation and of social contact. These conditions stimulate personal interest, optimism, and ambition in the employes. In the army, stimulation of these personal attitudes, as every experienced officer knows so well, is a most important consideration. A group of men may do their work mechanically and in a perfunctory manner if they are not vitally interested in it, and the work seems harder and more disagreeable than it does when the attitude is one of personal interest. This is a condition of low efficiency and waste. Let them become thoroughly interested and enthusiastic, let them throw their whole

souls into the work under the spur of interested competition, say, something that directly arouses their own instincts, and they are quite different individuals, often two or more times as efficient and tenacious as before. Work that affords expression to one's instincts is always interesting, and is entered into whole-heartedly, as is true of play. Such work is thoroughly enjoyed, and the inner frictions, feelings of passivity and even of slight opposition developed in many cases by the driving methods, are reduced. Enjoyment of one's work and enthusiasm in its performance are probably signs of bodily harmony and efficiency and it is doubtless only with this attitude that men can utilize their energy to the utmost and with greatest economy. Half-hearted response is wasteful and every means should be used to get the recruit and the soldier to put himself unconditionally into his work.

While men may work regularly and often with fair efficiency under general rules and regulations, it is only by personal appeals and under the stimulation of close personal interest that they really become enthusiastically aroused. To do the very best teamwork one must become closely identified with the team, as, for instance, in foot ball, and must get to feel personally affected by its successes and its failures. The leader or commander who fails to get such interest on the part of his men and who therefore gets something short of their very best effort, will do well to lay the blame on himself and make it a special problem to find out what is the matter with his methods or in what particulars he is not succeeding in arousing the interest of his men. The habit of blaming failures to subordinates, which some leaders thoughtlessly fall into, has a bad effect on the *morale*. The skillful leader of men assumes with his group, team or company, the responsibility of misfortunes, and he does it in such a way as to stimulate each member to his utmost effort by a sort of indirect suggestion. He will point out that in this and that particular "we didn't quite show our

greatest strength," or, "we didn't have the very best team play," "but," he will suggest, "we are going to show them next time what we can do," and so on. He is one of the group and they are all losers together when anyone does not exactly measure up to all that is required of him in any particular contest or campaign. The leader works himself into the hearts of his men—becomes one of the group—and can, with great freedom, indicate in detail just where each person can do a little better or improve his "plays," without any fear of arousing antagonism or personal hatred. Encouragements and punishments can thus be skillfully applied to individuals by manipulating the approval and disapproval of the group or company, by utilizing social instincts which are forceful enough for all but the most extreme cases of punishment and reward. Every normal man wishes to be well thought of by his immediate associates, and will do a great deal to preserve the good will and high esteem of his fellows.

The officer that assumes a large share of responsibility himself not only gets the hearty co-operation of his men, and their good will, but he puts himself into an attitude of mind that easily enables him to get at the real cause of the trouble. As a matter of fact, the leader of a group of men is largely responsible in numerous indirect ways for the general *morale* and spirit of the group, and it is well known that certain leaders can get out of their men a surprising amount of work and self-sacrifice. Blaming others is only an easy way of excusing one's self, of making it unnecessary to get at and acknowledge the personal weakness that is so unpleasant to admit, even to one's self. Such a habit is practically always evidence of weakness and inefficiency, and, what is equally important, it cannot fail to arouse antagonism in subordinates. It is a sort of reaction away from the reality of the situation and one that is bound to have bad accumulative effects on one's self. We do not like to

think of ourselves as inefficient so we find a cheap and, for the time being, easy way of showing that we are not, rather than of facing the reality and working to improve ourselves and our methods. A frank acknowledgment to one's self of responsibility in ill luck or failure is going a long way toward the removal of the real cause of the condition. It develops a habit that will in time make very great differences in the results obtainable, and opens up new problems of vital interest and gives new insight constantly into the best methods of handling men. With such an attitude one is bound to make rapid progress.

CHAPTER II

COMPETITION

I

The late Professor James said that nine-tenths of the world's work is done by competition. Even if it could be shown that only one-tenth is a more accurate estimate, this might be enough to turn the tide in a crucial fight. Our leading military men have long since learned the value of utilizing competition among their men. Perhaps the best present day illustration of the value of competition is that of the remarkable success of some of our industrial enterprises which have made use of the principle. ✓ The Bell Telephone system is a good example. By keeping a daily record of each of its thousands of employes, by pitting one individual against another, one branch against another branch, and at all times fostering the contest idea, the directors of this system have built up the greatest industry of its kind in the world. Scores of our greatest enterprises owe much of their success to the fact that the men directing them have understood the value of and have utilized competitive impulses in arousing their employes.

In our modern educational systems emulation and competition play consciously or unconsciously a large rôle. The Jesuits, who made extensive use of these impulses, called emulation the "whetstone of talent, the spur of industry." Without competitive impulses production in music and art and research in science would not be developed to their present stage. It is not altogether art for art's sake or a dispassionate "love of truth for its own sake" that impels one on in these worthy disciplines, but production in art and the search for truth in science furnish excellent opportunities for the matching of indi-

vidual genius and industry. The pleasure a scientific man finds in showing up the fallacies of theories opposite or contradictory to those entertained by himself is not explicable on the basis of a mere love of truth; the "truth" that one represents or that one's own school of thought stands for is the truth that one loves above all other truth.

Competition was the main driving force in the training camps of 1917 which in a comparatively short time transformed forty-five thousand civilians into army officers. While these men doubtless entered the camps in response to the call of duty, to a feeling that they would serve their country, it was competition for the high rewards held out that spurred them on to learn in one day what in ordinary times would have taken five. There can be little doubt, however, that competition as well as loyalty was influential in bringing many of them into the camps. The two impulses are not mutually exclusive. The great emphasis that society for its own safety placed upon this work was enough to make any man restless whose associates were going into it and were therefore receiving the attention thus merited. To respond to the competitive impulse is as natural for a man as to respond to the stimulation of hunger, and there is not a great deal of difference in principle, when it is your duty to take care of and train a man, between denying him sufficient food and denying him the opportunities of stimulation based on his rivalry instinct.

The results of competition can probably be measured or evaluated more accurately in the field of athletics than in most other fields. At the world's fair during the summer of 1915, the writer saw the international races held at Sutro Baths in San Francisco. There were four world's records broken that evening, due to the intense competition which resulted from the bringing together of the best swimmers from all parts of the world. Duke Kahamamoku, the Hawaiian short distance champ-

ion swimmer of the world, lowered at that time his record for the hundred yards as a result of being closely pressed by the swimmers who were competing against him. All the world's track records have been made when the winner was stimulated by a contesting rival or rivals racing along beside him. Few runners indeed have approached the hundred in ten seconds running individually. To make the best record it has been necessary to match two or more athletes against each other and thus to secure the greatest efforts from each man. The writer happened to be present the afternoon that Dan Patch, the world's then greatest pacer, lowered his record for the mile on the Midway track at Minnesota. It had been advertised that the great pacer would race against his previous record, and not a few of the observers were a little puzzled to see another horse line up beside Dan Patch at the starting line, but after the start they soon got the idea. The purpose was, of course, to arouse every bit of winning spirit in Dan Patch. At the last quarter a fresh horse joined the race and was allowed to run all the way in order to spur the racer to his best efforts.

Competition is the principle that has made foot ball, base ball, and boxing the most interesting of our athletic contests from the point of view of the participants as well as of the observers. This fact was brought home to me very forcibly last winter. During the early part of the winter I had an opportunity to indulge in one of my favorite sports, skating. There was a rink very close to the house, and several evenings each week I would go out alone and skate, enjoying the exercise very much. Then as a result of a vacation I had an opportunity to play hockey on these same sheets of ice for several afternoons in succession. The hockey game usually settled down to a hotly contested affair, the sides being about evenly matched and both teams playing for all they were worth. When the vacation came to an end I was denied the opportunity of playing hockey and went back to my

evening skating. I found now, however, to my surprise that it was necessary to force myself to get out on the ice and somehow I did not get the exhilaration out of the skating that was expected. After a few evenings, during which I continued to find skating a listless pastime, it slowly dawned on me that I was missing the stimulation of competition so strong in hockey.

There can be little doubt that the spur of competition is necessary to secure the greatest individual and group efficiency. Quicker progress is made by the individual or the group when the instinct of rivalry is stimulated than otherwise. History shows that the most progressive races have been those which have been exposed to continual competition by strong rivals. It is evident that to secure the best results in training recruits the officers should make use of all the opportunities possible to arouse competition among their men. At the present writing the Americans on the west front in Europe seem to be getting a great deal of stimulus from competition in "getting the Hun," and their desire to show superiority over the enemy, man for man, is a great factor in their enthusiasm, courage, and endurance.

An examination of the biology and psychology of competition supports the above view of its practical importance in stimulating men to their utmost capacity.

II

There can be no doubt that competition is well grounded in instinct, that it is based on "original nature" in man. Many more animals of all sorts are produced, because of the geometrical rate of increase, than can find room and the necessary food in the world. Hence, "struggle for existence" arises, as the biologists since Darwin have recognized, and in the struggle, which may of course be either conscious or unconscious, the fittest survive to reproduce their kind. Usually in the animal kingdom energy and alertness to the activity of rivals bring the reward of the victor. An animal that is not

spurred to greater effort or activity by the sight of another animal of the same species getting food, for instance, is unable to profit by the experience of others; it must rely on its own appetite, and when its time of the hunger impulse comes the available food may be gone.

Usually each animal is highly sensitive to such acts of other animals of whatever species as tend directly or indirectly to affect itself, to limit or extend its own opportunities of life. There need, of course, be no intelligent appreciation of any such effect upon one's self; the sensitivity is instinctive and the acts thus stimulated take place *because they are the most natural or fit things to do under the circumstances*. What dog, even though satiated, will not eat more or "stay in the manger," under the stimulus of another dog, not too formidable, approaching the food? To those who have had experience with the care of domestic animals it is well known that when the animals—cows, hogs, chickens, etc.,—are fed, the hurried movement toward the food of any one of a kind greatly excites the others and increases their approach.

This characteristic sensitivity of an animal to the acts of others, threatening directly or indirectly to limit its own opportunity, has obviously a life function, a survival value. Lack of impulses to greater activity under conditions bringing success to one's fellows could mean nothing but final defeat in the struggle for existence and the biological elimination of one's kind. In animals there need be no idea, as has already been said, of the advantage of the rivalry impulse. The "dog in the manger" does not defend the food which it cannot itself eat *because* it appreciates that it will in time be hungry and need it; *it simply cannot leave the food* under the stimulus of another dog waiting to get it. It is constituted by heredity to act this way just as we are constituted to sneeze, and must sneeze, when the nostrils are sufficiently irritated.

In human behavior there is often more or less explicit appreciation and thought of the benefit to one's

self of the competitive act. The child may become aroused by another child's taking what he will in time be able to use, because he appreciates in a measure that it limits his own privilèges or possibilities; and each of the rivals for a certain position appreciates fully that the success of the other means his own failure. But even in such cases of explicit recognition of the relations of the different competitive acts, it is not improbable that the interest is compelled by a real instinctive disposition. The writer remembers living one time for a few years in a town given to speculation on mining stocks. The success of one speculator meant, of course, the misfortune of another. He noticed, as a disinterested observer, that frequently the announcement of some one's failure in a venture brought instantaneously a fiendish satisfaction to friendly fellow gamblers, an instinctive satisfaction expressing itself in the laughing at and the tantalizing of the unfortunate person. Immense interest in the "returns" was manifested, an interest far exceeding the mere rational appreciation of the possible effect on one. Men having very little at stake seemed about as interested as those with considerable in the game. This fiendish glorification at the rival's loss flushed momentarily over individuals who were not at all proud of it on more thought about the matter. The instinctive basis of these expressions was obvious. Whether there is a pure rivalry instinct, or whether these impulses and acts are expressions of such other recognized instincts as self-assertion is not important for us here.

Pugnacity easily and frequently shows itself when one's acts or desires are obstructed by others, especially by rivals. Who has not seen children at home get into a fight for some morsel of food, or for some sort of reward or approval, largely because the activity of the one excited and stimulated the other? What healthy boy, even just after a meal, will sit still and see his brother get an extra piece of cake? Boys "are not made that way".

Whose heart does not throb with jealousy on seeing an equal in any social or economic service unjustly advanced beyond himself? In the adult man such instinctive impulses may be so suppressed or sublimated as to challenge recognition by his fellows, but they will nevertheless stimulate him to greater effort, or possibly, to criticism or anger if the recognition of the rival was obviously on unjust grounds. Under peculiar conditions they tend toward discouragement and disheartened effort.

Self-assertion, and possibly also a distinct rivalry instinct, as suggested, seem to be innate tendencies most directly and generally underlying the competitive behavior of animals and of men. Even without any more direct motive than these instincts furnish, a person cannot stand unmoved and witness the success or recognition of an associate. Even reading or hearing of the success of distant and past heroes arouses us to self-ambition. Various other instincts are, however, usually excited and enter into competitive behavior. If a fellow creature is seen getting food similar impulses are aroused in one's self; under certain competitive conditions sexual jealousy is aroused, under others struggles for food or for freedom or for renown. These are not mere imitative acts, as is superficially supposed; they are compelled in each case by a degree of antagonism and by self-assertion. Pugnacity is often strongly aroused under any such circumstances.

Rivalry implies something like equality in a more or less personal struggle. Jealousy and envy are mental conditions, or emotions, resulting in different degrees and successive stages in one individual upon the perception of greater success or preferment of a rival or competitor. Envy is more likely to involve the added consciousness of personal injury, as some authorities have analyzed it. In the various types of competitive behavior we use the word *competition* especially in business and economic relations, *emulation* in scholarship, and *rivalry*

in love, in politics, and in other matters in which the considerations are more personal in their bearings and of less obvious or direct social value. In rivalry hostility is more apt to enter. Emulation for excellence in achievement and competition for some sort of prize or economic reward may, of course, be friendly and pre-arranged by the competitors themselves. Competition is the "spice" of many kinds of play and of games involving both individual and group contests.

Group competition involves co-operative activity among the members of each group, and is an effective means of teaching co-operation and teamplay. Such competition usually takes place under certain restrictions, such as rules mutually agreed upon or conditions standardized by society, which become principles of justice or laws. Social recognition of superiority is a great spur to co-operative activity, bringing out the best effort of each competitor.

In group competition, as has been suggested, the individuals cease to act on their own accounts; each must act for the group end, for the good of all concerned, even at personal sacrifice and limitation. Thus individual temper and freedom of choice and the sense of personal responsibility are, in a measure, eliminated, or at least are subdued and directed toward the consideration of group good; and co-operative effort and teamplay come to the fore.

Thus in group competition we retain the stimulating effect of certain individuals being pitted against others, and leave out the more unpleasant personalities coming up in individual rivalry; we also get the steadying influence of the larger and more impartial agencies, rules, or social constraint imposed, and with it the greater social interest and stimulus resulting from the implied social weal or woe, the rendering of "increased service to outside parties." Finally, group competition affords opportunity for the most effective stimulus to real co-opera-

tive effort and teamplay. One *must* learn in such competition to study the group aims and means and the interrelated contributions of each member, each taking the part assigned him as of most service to the common good. Action on one's own account and according to one's own idea is out of the question except within limits. This implies also the subordination of one individual to another, and the surrender of his will to the wishes and commands of the directors of the contest. When these attitudes are taken unconditionally and whole-souledly, allowing, of course, for individuality within the limits of initiative due each person, we have loyalty at its best.

With special reference to economic usage President Hadley, of Yale, has defined competition in Baldwin's *Dictionary of Philosophy and Psychology* as, "The effort of different individuals engaged in the same line of activity each to benefit himself, generally at the other's expense, by rendering increased service to outside parties." Two contestants in a fight, he explains, and two nations each trying to out-do the other in standing armies are strictly speaking not competitors; they are excluded by the last phrase in the definition, "rendering increased service to outside parties." Nations may, however, compete in foreign trade because the one displaces the other only by rendering superior service. While the distinction here suggested cannot obviously be too closely pressed, the definition quoted may serve to indicate for our present purpose the main essentials of competition.

III

↓ The old custom or usage in the army was to make promotions and advancements largely on the basis of seniority in the service. The officer who had been in the service the longest was the highest ranking officer. However, soon after our entrance into the present war, the War Department changed the basis of promotion to that of efficiency; and this fact offers one of the best and

most practical means of stimulating competition in the men. It is human nature, and especially an American characteristic, to desire to reach the top in any line of endeavor, and the officer who neglects to impress on his men the fact that they have a good chance for advancement is neglecting to use one of the best available stimuli to increased effort on the part of his men. It is important to impress upon the new recruits that they have entered a game that is played each day and that there is continual competition; that in order to win out in the army one must be alert at all times, for soldiering is a big game with no limit to the stakes to be won. This view is not incompatible with a high moral tone in the army. But the advancement reward is not the only method of stimulating competition. There are many specific ways of arousing competitive impulses without a materialistic reward for the winner. The keenest competition may be developed in a short written test.⁶ For example, a short time ago, in a class in military courtesy it was becoming quite apparent that the men were losing interest due to the continual repetition of the more important features of the subject. The work had been all oral and it occurred to the instructor that a written test on the subject might stimulate interest in the course, especially if it were announced beforehand that the marks would be posted. The results of that test showed increased application in studying the subject, and when the instructor went out in the squad room to post the marks the men came running in their eagerness to find their relative standing. Every man likes to rank high among his fellows, and when an objective rating of all the men's work can be accurately obtained and made accessible to all it becomes an incentive to greatly increased individual effort.

Competition in class work should be stimulated by frequent written tests and the relative standing of the men determined thereby should be published. This is a

means of enabling each man to compete against every other, for every time one man moves up one step in rank some other must go down a step. Similar treatment of results of other contests is recommended in so far as the results can be rated with a reasonable degree of accuracy so that the men will feel that no injustice is done. Many good personal traits cannot with the present development of methods be thus exhibited, however, and the instructor must be careful not to do personal injury by carrying this scheme too far. Every good method has its dangers and rules cannot take the place of the resourcefulness of the instructor or leader.

Another idea employed in the training camps, which has been tried on recruits with good results, is that of keeping the grades of the men on cards. On each of these cards is the list of the men in a company, and every day some of the men are graded on their work in drills, recitation, etc. Of course it is impossible to mark every man in one day's drill, but while one officer conducts the drill another marks some of the men especially observed each day. Grading can be done rather accurately on a scale of five: 1, for *very good*; 2, *good*; 3, *fair*; 4, *poor*; and 5, *very poor*. This plan of giving special attention to a few men each day also tends to develop better attention to individuals and to stimulate personal acquaintance. For this latter purpose it is frequently a good plan when the men are new to have each wear a tag bearing his name. There can be little doubt that personal interest in a man tends to stimulate his ambition and to arouse him to better effort. All officers should make it a point to learn the names of the men and to encourage the enlargement of acquaintance among the men themselves, for the soldier will respond to competition much more readily when he feels that he is personally known and that others are interested in his record. Every normal man desires to stand well in the eyes of his fellows.

Competition can be made to enliven almost any process *as it is going on*, as well as through an interest in the results, thus making the practice more like play. Our company at the officers' reserve training camp of Snelling, Minnesota, had been practising grenade throwing for several days, and interest in the drill was getting to lag somewhat, due undoubtedly to the monotonous repetition of the same movements,—the extended left arm, eye on the grenade, the crouching position, the throw, and the dropping of the body quickly. Competition had not definitely entered into the practice until one morning one of the men placed half way between the two lines of grenadiers a large board that served as a target. This gave the opportunity for each line to knock down the target in turn, and as a result the practice quickly changed from tedious work to a game into which each man entered with renewed vigor. There is really no part of the days' training that the officer who is alert and ingenious will not find an opportunity to enliven with competition, both individual and group.

To compare more definitely the usage in different training camps the following specific questions were put to various army officers engaged in training men:

- “1. Do you regard it wise to stimulate competition? On what matters do the soldiers compete and what means do you have of judging their results?
2. Do you encourage competition between squads and between companies?
3. What are some of the forms of competition that you have employed? Which have proved most successful?”

All agreed that competition should be encouraged and all showed that it is used to a considerable extent both among squads and companies. Soldiers compete in athletics of various kinds both for the development of personal interest in the group, later to be considered, and for

various desirable physical and mental results; they compete for the best appearance in inspections and for superiority in most every kind and detail of drill. Individuals of squads, platoons and companies compete among themselves in such things as grenade throwing and target practice, admission to the latter being granted only to those making a certain fair score with the aiming devices. Many of the exercises lend themselves well to both individual and group contests. It is important to note that individuals may compete among themselves in most any kind of group contest in which the results of individual scores are subject to rather accurate measurement and are summarized or averaged in group contests. Trainers should take notice of the difference between competition for superior *results* thus objectively compared, and competition *in the process as it goes along*, one side, as in a game, trying to get through before the other, or in some way to out-do it. The former kind of competition can be greatly improved and enlarged in scope by a proper standardization of results. Such standardization of a larger variety of performances would enable each individual and each squad or company to compete with any other individual or similar group in any part of the country or in Europe; it would also enable the individual or group to compete in successive periods against its own record and to plot curves of the progress made.

All competition whether of individual with individual or group with group should have purpose. One officer states that, "these competitions are always successful and one could hardly be said to be more so than another." Such a statement does not show a clear understanding of the various objects of competition. Competition may aim primarily to motivate intensive practice for increased skill of each individual in some particular kind of performance; it may have as its special object the development of teamplay or of a strong group consciousness, so that a personal interest in the company will be aroused

to the extent that the more efficient members will aid the less efficient or compel them to do a great deal of hard work and practice; it may have for its object the arousal of enthusiasm and optimistic aggressiveness in general. There are many other objects that one may have in view in competition, and certainly all forms of contests are not equally successful for the attainment of these various ends. The new officer should be careful not to lose sight of the specific purposes of competition, and he should select the type of contest most suited in any one case to the end in view, varying the nature of contests, of course, to keep interest at its highest level and to give diversity of skill. The lack of a specific purpose usually means that the competitive exercise is not as useful as it should be, even though it may be interesting.

It seems that improvement could be made in many particulars as to means of judging results. This is the aspect of probably the greatest gain in recent educational progress. One officer says: "The only means of judging their results (in competition) is observation on the part of their officers and non-commissioned officers;" another, "Inspection and test," but the *test* probably applies only to a few of the more objective results, such as percentage of hits in various kinds of target and grenade practice. It would be very desirable for certain officers to co-operate on the formation of various measuring scales for accurate rating of different kinds of performance so standardized that any squad, platoon, company, or any other group could compete with the records of any similar group in the entire army. By this means various methods of training could easily be evaluated quantitatively, and effects of age, climate, season, and of other conditions determined. Such standardization of performance is of very great value for answering specifically most important questions that arise regarding training. It could be effected most economically and efficiently by

calling into assistance some of the most skilled educational experts in performance tests.

Competition may serve so many purposes ordinarily overlooked that it is well to draw extensively on actual experience to see what it can do in quite different lines from those usually thought of, lines that indirectly bear on some most important matters of attitude. It is well known, for instance, that an individual will usually live up to what is expected of him; if he is regarded as being worthless he finds it very hard to be otherwise, while if great things are expected of him he is naturally aroused by the confidence and encouragement of others. In fact, what each person thinks of himself is pretty largely only what he knows or thinks is others' estimate of him. In the presence of persons who regard him meanly he is apologetic and weak, at the lowest level of his resources, while in the presence of inferiors he is aggressive, self-confident and often able to use his powers at their best. It is true that what others think of one depends largely on what one has actually done, but often if one does exceptionally well in some one line of activity the respect and encouragement thus gained is applied more generally and one comes to be rated as superior in other matters. The same thing is true of groups, and the principle is so well illustrated in a valuable memorandum by Colonel N. B. Crosby, prepared for us by the kind co-operation of Brigadier General Robert N. Getty, of Camp Dodge, Iowa, that we shall quote it in full.

"In commenting on the 'Psychology of Handling Men' in so far as it may be accomplished by 'developing them by means of utilizing, implicitly or explicitly, their instinctive impulses of competition and emulation and incentives of loyalty and teamplay,' an idea of its application may be gained by considering the development and improvement of an organization of which one takes command, and which is far below standard; in fact, which is regarded as the 'worst company in the regi-

ment.' As long as the men in it recognize and admit the fact, just so long it is sure to be. To improve it in a military way is possible but difficult. You cannot force a man to drill with 'snap', you cannot force him to shoot well, you cannot force him to ride well. You have to inspire his confidence in himself and in his fellows to accomplish this. He knows he belongs to the worst outfit in the regiment; what's the use? You organize a football or a baseball team: have a field day. Nobody has told the company, and the men of it don't believe, that they are necessarily hopeless in this line. They win in these competitions; a pride in themselves is developed, not perhaps as deep as it might be, but it's there. The captain says, 'That's some company; we showed them something.' The men say it themselves; they have a chance to commence to believe in themselves. We beat them at football, we'll show them how to shoot.

"You have your start. If you can induce the worst company in the regiment to believe it is the best, not merely tell them that it is, but make them believe it, the best company in the regiment must look out, it is destined to have a rival. It may be a coincidence, but I don't believe it, that the company I consider the best in my present regiment is the one that won the first regimental field day. I congratulated the captain at the time and told him that he was most fortunate in his start, that such things made companies. That I might not consider it distinctly my own idea that this company is the best, I just asked my lieutenant colonel which was the best company in the regiment. He hesitated: 'It isn't easy by any means definitely to pick out your best company,' but he named it first. A few months ago our division commander was pleased with the double time of our regiment. In consequence, he sent us in from drill two hours ahead of time. I heard one recruit say as he went into the barracks,

'We're the boys that can double time.' The regiment always will double time well as long as that spirit prevails.

"To draw conclusions from the above: You have given your organization its start through athletics; you use it to make them live up to the standard at which they conceive they have arrived; and they arrive at that standard. They have pride as individuals in their organization, and they are not going to disgrace it; if the individual is inclined to slip back, others won't let him. They may persuade him into not disgracing it, perhaps by moral suasion but more likely by physical. Twice in one troop has it come to my knowledge that the physical method has prevailed. Once the troop conceived that one of its members needed more, or more vigorous, baths than he was taking. The men used horse brushes and sand and then reported that the man was made that way, they couldn't improve him. Another instance was where a man was turned off guard for being dirty. The most worthless man in the troop undertook to and did thrash him with a watering bridle for disgracing the organization. Now, both of these instances occurred in a troop that had been in existence less than four months; it was during the reorganization in 1901, and but one man who had ever soldiered before was in it. These two occurrences were within ten days after the troop, a bunch of recruits, had won a tent-pitching contest from the troop which held the Army record at the time for this same event. It had evinced no troop pride prior to this; it had a superabundance shortly after, as the above would indicate. I knew this troop for seven years, and during this period it never lost a field day. The pride of organization came to it early and survived as long as I knew it.

"One more instance: There was a troop of cavalry in the Philippine Islands, the same one from which the

recruit troop just mentioned had obtained its start by defeating it in the tent-pitching contest. It had been a good troop; there was none better in the service when I had first known it in Dakota years before. When I saw it again in the Philippines it was awful. It was the worst troop in the regiment, and the men themselves knew it. No member of it would deny it if you told him it was. Where it could be undeniably rated, as in rifle firing, the records showed it to be the last. It was almost a year after I first saw it in the Islands that it had a chance to come out of it. It didn't win a field day, but it did win a standing Roman race that was particularly exciting. It further developed that the time made in this two-horse race with the rider standing was a second faster than the time made in the flat race over the same distance. The troop commenced to brag about itself. Everybody had seen them win, and they did the talking about it. They commenced to take an interest in themselves. It was at the head of the regiment in rifle firing the next spring instead of at the tail of it, as it was the year before. The men of the troop had come to believe in themselves, and they soon became as good a troop as the regiment had known. At Christmas, 1916, I received their Christmas menu from the Border. The troop's history was printed on it, by no means a usual thing. There was recorded the number of times they had headed the regiment in rifle shooting. It was a good many times, because in the old days they had been a fine shooting outfit. It had headed the regiment for the last two years in rifle firing, and had won the regimental cup permanently. It had won two field days and the regimental baseball championship. The menu didn't fail to mention everything the troop had won. It (the troop) was proud of itself, and it had a right to be. It was as good a troop as you could hope for. The Roman race hadn't done all of this, but had furnished the start.

“In the above quoted instances, directly and indirectly, explicitly and implicitly, the impulses of competition and emulation had developed the soldier and made a better soldier of him. That it had developed his loyalty to his organization, which in the Army means teamplay, is without question.”

Brigadier General S. M. Foote, Camp Dodge, Iowa, calls attention to the need of developing self-responsibility in the soldier. While this view is not incompatible with that which emphasizes the importance of competition as a motivating agency, it fortunately points out an important principle not to be overlooked in the training of men for warfare and for life generally, that of giving a proper perspective and an organization of the impulses more immediately aroused that will fit men to stand against obstacles for remote ends. Competition should be so managed as to throw one on one's own responsibility and resources as far as possible, and yet care must be taken under present conditions not to eliminate too many men by this method. All behavior must, however, grow out of instinctive impulses of some sort. General Foote says:

“I think you are entirely right in your assumption that the principle impulse to which military men are accustomed to appeal is that of competition. In this connection there is one point to which I wish to call your attention, a point that is sometimes lost sight of. Each officer and each man must realize that his efficiency in the end must depend upon his own individual effort. In other words, he is himself responsible for what he is and what he becomes. The instructor points out the way: it is the pupil's business to proceed, utilizing his own faculties in case of any difficulties encountered. This is a very different operation from taking by the hand and leading one along. However, in case of some men it is necessary in the early stages of their development to lead them by the

hand. * * * With the men that have to be formed into an army in a short time considerable assistance must be given, but at the same time my idea has always been that even in those cases the men should be impressed with the idea of self-responsibility. So much is being done for the men in the army that I am afraid there will be instances of 'Mollycoddling' which is the last thing on earth we want. So I think it important to impress upon them all that efforts that are made in their behalf are made to assist them to attain a higher standard and not to take the place of their own effort."

CHAPTER III

PLAY

I

✓ Years ago there was a tendency among a great many people to consider the time spent at play and recreation as time lost, but now it is generally recognized that play is one of the main means of human growth and development, both physical and mental. The War Department has recognized the value of play by authorizing the establishment of athletic departments in the various training camps so that each camp has at present its athletic director, boxing instructors, football and other athletic coaches.

It took some time for the large industrial enterprises employing thousands of men to recognize the importance of play. The old theory was to get as much work as possible out of the men between morning and evening and to let them shift for themselves so far as their recreation was concerned. Then a few of the larger firms awoke to the fact that if their men received proper recreation they would work more efficiently and be more contented. They also found that by providing opportunities for recreation and by developing their own teams for contests with other organizations and institutions they could develop bonds of good fellowship among their men and a strong *esprit de corps*; by such means the men would identify themselves with the interests of the firm and would work for its success and prestige. So now we have a corporation like the National Cash Register Company, employing thousands of workers, with a full recreational equipment, including baseball diamonds, a stable for horses for the employes to ride, vast stretches of fertile soil for them to use for gardening, swimming pools, bil-

liard rooms, and many other means of recreation. The firm has found that the men are more enthusiastic and do better work as a result of these conditions. Many other companies are learning the same lesson. It is after all nothing more than showing a larger human interest in their employes and in their general welfare, and in return they are getting the sympathy and the teamwork that such personal interest and attention are bound to stimulate.

That play goes hand in hand with strenuous work is illustrated by observing the life of ex-President Roosevelt. His memoirs show that the more strenuous his work at Washington was the more he felt the need of tennis playing, and this form of play fitted into each day's program. His many hunting expeditions have given him the double distinction of being not only a leader in politics, but also a leader in a large sense among sportsmen. Indeed, it appears generally in life that the individual who plays most heartily is usually the one who thinks the best and fights the hardest.

A short time ago I had occasion to drill a number of new recruits, none of whom had ever received any previous military training. At the end of three days, during which time I had been teaching them the elementary principles of the squad movements, facings, etc., I was struck by the rapid progress made by some of the men and the backwardness of others. This condition aroused my curiosity to find out the reason for the great difference in aptitude exhibited by the men; so I took a list of those men who had displayed the most progress, and then I asked all the men who had ever had any training in athletics or who had taken part in such games as football and baseball to take one step forward. Although I had expected something of the kind I was surprised to find that the men who stepped forward were those men who had exhibited the most aptitude at drill, almost to a man. Another illustration that occurs to me shows the effect

that play has toward easing off a mental strain, and thus toward leaving the individual better fitted for the task at hand. During the summer of 1914 I happened to be a member of one of the crews representing the Minnesota Boat Club at the Northwestern regatta held at Kenora, Canada, on the Lake of the Woods. The regatta lasted three days, and the first two days were gala days for the Duluth Boat Club. They had made a clean sweep of all races. We had only one crew left that had not been defeated, and their spirits were so low on the morning of the last race, and the mental strain of the first two days had wrought such havoc with them, that optimism was at a low ebb. Our coach must have realized that what the men needed was mental relaxation, for that morning he allowed us to go swimming for a short time, which was against all rules of training. One could see, however, that the men benefited by it. Everybody's spirits seemed to rise, and that afternoon our junior four won their race. These may of course be mere coincidences, or selected cases, but they seem to be common enough to have significance and valuable suggestions to the leader of men. From reports we get from France, it appears that the English have encouraged the playing of a number of their national athletic games behind the lines. A British officer told me that a game of rugby was the best means of getting one's mind off his work and of thus securing complete mental relaxation while resting behind the lines. There is little doubt that baseball will be on the bill of fare for our soldiers while in France.

Now while our training camps are equipped with athletic directors, the officer will find as a result of his influence over the men while in close touch with them, that he will have many opportunities to direct the play activities of the men and to encourage them to participate in the games. In order to encourage play at the proper times and to apply the proper stimulation for play it is desirable that the successful officer understands the the-

ory of play and the psychological principles underlying it.

II

It seems, and is now generally agreed, that the impulse to play is not only innate in man, but that it has its roots well established in the animal kingdom. Practically all animals have their plays, which occupy no small part of the life activities. This being the case, play must have some important function in the life of animals and man; for nature is not so wasteful as to implant in animals of all kinds so generally as play appears, impulses to a large amount of useless activity. There is objection to calling play *an instinct*, for play activities express themselves in almost all conceivable ways. Often young animals are seen playing as they must later "work" or fight for the preservation of their lives. Nevertheless playing in many respects is much like such other unquestionably innate dispositions as express themselves in sneezing, mating, caring for offspring, getting angry, quaking with fear, etc. There can be no question that nature has fashioned man so that he must play under certain circumstances just as he must sneeze under others.

What then may the function of play be? Careful studies of play have shown that play affords exercise and develops physical strength, alertness, skill in defense and attack, endurance, leadership and subordination, or division of responsibility, and detailed acquaintance with one's fellows beyond that which can be obtained in most any other manner. A quotation from Baldwin, who has given much time to the study of the social bearings of play, is pertinent: "Dogs in their play at fighting often set numbers against swiftness of force, and exchange parts in the midst of the game, the chaser being chased, etc. Birds in the same flock will unite to storm a tree where a fancied [?] enemy is perched, just as they combine against a real enemy when he has the tree to himself.

* * * The extended 'make believe' of animals—
for example in pretending to bite one another, with the

elaborate responses of pretended [?] anger and attack—shows invaluable practice in varying and understanding quasi-social relations and situations. Mock fighting, sometimes very elaborate, is widespread in nature; ducks play at fighting on the water, birds in the air, animals injure one another in their playful zeal. The remarkable phenomena of leadership show just the results to be expected from game exercises. In certain packs of dogs, in the words of Hudson, 'from the foremost in strength and power down to the weakest, there is a gradation in authority; each one knows just how far he can go, which companion he can bully when he is in a bad temper * * * and to which he must yield in his turn.'" (*Social and Ethical Interpretations*, pp. 150 and 151). All this can be applied to the human animal with only slight changes in the applications.

Even in the case of man play is still a prime educator and trainer in the practical and social affairs of life. As Baldwin so well shows, it develops resourcefulness of mind and body with self-control; it overcomes awkwardness and ill temper and supplants them with well balanced co-ordinations and control of the emotions in critical situations; it affords capital opportunity for the training in initiation and in devising new modes of attack and defense, and in the manipulation of other persons and of materials; it compels careful observation and imitation of the more successful methods and means of superiors, and affords ample opportunity for the constant practice on others of new ideas gained; it affords one of the very best means known of a proper understanding and estimate of one's self, both of the strong and the weak points as well as of the possibilities. Furthermore, it takes the mind of the adult man, pressed with business and professional worries, from his cares and loses him wholly for the time in absorbing mental and physical activity. It thereby releases inner tensions and distressing conflicts and gives the most wholesome and varied exercise

and practice in skillful performances. A short time daily devoted to play not only safeguards one against various common mental and physical ills, but it also implants a bouyant spirit, an optimistic bearing expressive of efficiency and confidence. To the soldier it is of prime importance; it makes not only good citizens but good, efficient, optimistic and moral soldiers.

That play has a survival value in the biological struggle for existence, there can be no doubt. Those animals which in their youth play at various kinds of activity gain strength and efficiency, as well as adaptability, which enable them to out-do animals with different tendencies. The result is that they live to reproduce their kind, and so play impulses become innate. It is not assumed, of course, that specific effects of play are transmitted in heredity; only that individual variations in the germ plasm, due in the main to yet unknown causes, predispose certain animals to play more than others and that these animals are favored, as they obviously must be, in the struggle with their fellows. General effects upon health and energy may conceivably be transmitted, however. Even in our own civilized race, where the weak are protected, those who play most regularly and wholeheartedly doubtless escape many diseases and ills which eliminate others. In time this "natural selection" even in the human race amounts to not a little.

There are, however, as has been mentioned, objections to calling play a *specific instinct*, because of the wide variation in its forms of expression. Any kind of activity can under favorable circumstances take on the consciousness or attitude of *completeness in itself* without consideration of ulterior ends or results, which characterizes play as distinct from work. While in a sense there is a wholesome feeling of "don't have to" about play, it can well be contended that in other respects play is even more serious, more soul-absorbing and earnest, more wholehearted and genuine, nay, more nearly "real life" than is

work. Children are more concerned about fairness in play than in work. Fortunate is he who makes of life itself a big, cheerful game played absolutely on the square!

We shall speak of play as an *impulse*, an impulse to do various things without the direct compulsion of necessity or of reason, an impulse to assume with respect to most any kind of activity the true art attitude of satisfaction in the activity itself. Think again of the sneeze which is pleasant and satisfying in itself, complete without the consideration of bringing about certain results, done simply because under the conditions of stimulation it is the most natural thing in the world to do, justification for which is unnecessary and the thought of or request for it absurd.

When several individuals play together, play usually takes on the form of *games*, involving either individual or group competition. The mere play impulse furnishes an excellent motivation to competition, along with self-assertion, and possibly rivalry, as we have already noted in the previous chapter. It is in group-play contests especially that various of the socializing and developmental influences of play appear at their best. As would be expected from the biological utility and origin of the play impulse, play frequently takes on the form of combats and of hunting. Fighting plays are noticeable in animals of nearly all kinds, and have been carefully studied by Groos in his interesting book, *The Play of Animals*. Teasing and bullying, scuffling, biting, chasing and being chased are noticeable as chief and absorbing play activities among animals on every hand,—birds, kittens, rats, puppies, colts, monkeys, and so on. Hunting plays take on the form of playing with real living booty, as kittens with mice, the latter trying of course to save themselves; with “inanimate play booty”; and with “play living booty”. In the last two cases the play booty taken in the game is imagined as inanimate and as alive, respectively. All these forms of play are, of course, represented

in human games. In addition to them various kinds of contests (backed by impulses of self-assertion, rivalry and pugnacity) occupy a large part in the human program of plays.

There are also among children plays of caring for offspring, plays with dolls and plays that some members of the play group themselves are children of certain play parents, and plays of caring for the sick and helpless. Here, of course, imitation and experience are influential; but this only shows how adaptable this play impulse is, how it is influenced by acts going on about the individual, making him copy and practice in play the acts which are later in life to be serious work for the preservation of the individual and race. In plays children assume the rôle of various classes of adult workers about them, as when a boy plays police. In such cases they necessarily become very careful observers of the behavior of those whom they represent and so make valuable additions to their own experience and knowledge, additions which are bound to serve them well in future years of responsibility.

Thus in the higher types of animals, especially man,* whose life extends over a long period through changing seasons, all the important acts for the preservation of life are represented in play. Play develops and strengthens the plastic individual for the exigencies of the life struggle as probably no other educative agency can do. The person who has not taken a normal part in the plays of childhood usually shows abnormalities that more or less seriously hamper him later in life. While these defects are not necessarily the *results* of lack of play they show at least that play tendencies are found at their best with the highest individual efficiency, and few individuals would dispute the assertion that a normal child deprived of play with the social contact, the exercises, and the various types of training that it affords would be seriously handicapped in adult life among his fellows.

It is unfortunate that most people think of play as only for the child. In the animal world adults do not cease to play. Old work horses may often be seen playing when free. The all-too-prevalent view that one's work supplies the necessary exercise reflects a narrow attitude toward play that is not found among the men taking the bigger burdens of life's duties. Play affords much more various and whole-hearted exercise than does work, which usually settles down to more or less of mechanical routine; but, as has been shown, play does many things for the individual besides exercising him. The most important effect of play on a person is psychic, and consists in release from deadening worries and a general increase in optimism and love of the game of life. The adult person, even the soldier, is prone to fall into a more or less apathetic routine. Play tends to keep him adaptable and to prolong the characteristics of youth, the results being greater self-confidence and efficiency and an air of contentment that undoubtedly makes for health and prolonged life.

The over-strains of trench life and the general anxiety and nerve exhaustion brought about by the war have resulted in the appearance of frequent cases of a new mental disease typified by what is known as "shell-shock". The soldier is worn out by the persistence of the difficulties before him; they allow no real relief, no complete relaxation. He cannot see his way through the terrible obstacles, strains, and unrelenting anxiety. His life impulses are dammed up, impeded, with no good prospects of relief in the near future from the fearful task. The end of it all cannot often be seen through the hardships. This unyielding situation, with the strains and exhaustion of the soldier's life in the trenches, results not infrequently in certain disorganizations of the nervous system, in "shell-shock" and other neuroses.

Now, as a prophylactic against such an unfortunate condition, as a safety valve for the pent-up impulses to

express themselves in more natural life activities, as a relaxation from the terrible anxiety of trench life, and as a stimulus to optimism and courage, play stands supreme. Our ordinary work and our fighting activities are all performed for the attainment of some desired end; they are not indulged in for their own sakes. If this end eludes us continually, proves to be difficult of attainment, we are put under strains of anxiety. This is particularly the case when the desired end is very important as is the case in the winning of a war for freedom. Everything else in life to follow the attainment of the great end sought is conditional. It is like expecting needed money day after day with no clue as to when it may come! No clear way is open before one. This causes inner conflict of impulses, strains and worries that are exhaustive to the nerves. Worry is made up of conflicting impulses, confused and opposing tendencies to do several things. Try for about five minutes, as you read on, to push gently but steadily with the right hand against the pull of the left, and see how exhausted the arms will feel. Note how much the sensations resemble those experienced in extreme anxiety and worry, except that the former are more localized.

Against such strains of anxiety there is no relief but sleep and play. The mind will otherwise not cease dwelling on the situation. The pull and push will not abate. Often sleep is entirely impossible. "The man who has ceased to play is to be pitied." (Seashore, *Psychology in Daily Life*, p. 14). Play brings relaxation; it finds an outlet for all pent-up, repressed impulses. It seeks no ulterior ends, but makes life here and now self-sufficient and complete as the moments go by. Even in a game by amateurs the "results" are not important; the competition goes on not for the results *per se*—for the consideration of "who beats?"—but to enliven and stimulate the acts themselves, to give zest to the game. In the play itself as it goes on we have the reward; play, like art, is self-

sufficient, self-satisfying. He who does not know how to play does not know what real life is, life as nature "intended" it to be; to such an individual life is always something ahead of him, something for which to work and to sacrifice immediate pleasures. Not so with the person for whom life is a fine, big game; for him every moment is rich and full in itself. Play banishes for the time all thoughts of worry and anxiety, all occasion for this future longing. It does more than to make the negative contribution of affording relaxation from strain. It unifies and mutually inter-stimulates the various organic impulses. It fills one with an indescribable feeling of youthfulness and fulness of life that cannot be a failure. The habit of play results in permanent attitudes of elation and contentment, and it gives fortitude and endurance against hardships. The whole soul is thrown into play without any reservation whatever, when it is real play. That is sportsmanship; not the kind of play that glories too much in victory as such or that retrospectively regrets defeat. When a real game is over, it's done for, once for all.

This is the kind of activity that makes against shell-shock and other nervous diseases and anxieties in trench life, against "mental break-down" of the various sorts and lack of self-confidence and efficiency in the busy whirl of life in the civilized world. If there is a "fountain of youth" it is play, for play not only brings relaxation from drudgery, anxiety and *ennui* and prevents mental disease and depression, but it undoubtedly prolongs many youthful, care-free attitudes. Play habits and tendencies are synonymous with versatility, sociability, personal influence, optimism, vigor and courage. Play brightens life and makes it unnecessary to ask what it is all for or what is the highest aim of life; it shows its effects in one's general bearing, giving a quickness and decisiveness of step and movement even to old limbs. The incentives to play are the cry of nature in us to varied activity, the call away

from too long concentration and anxiety, and it is certainly desirable, both from the standpoint of efficiency and from that of humanity, that the soldiers who are compelled by the interests of their country and of democracy to endure hardships and monotony, to pound away at almost unyielding obstacles under danger and severe exposure which try them to the extreme, should not only be privileged but encouraged to play frequently and whole-heartedly.

III

To our question, "Do you encourage play and athletic contests among your men?" every answer from different army officers was in the affirmative. Here are some typical replies:

"I have always encouraged participation in athletics by the members of my company. Where a gymnasium has not been provided, I have purchased apparatus for instruction in the barrack or on company playgrounds, providing for boxing gloves and ring, baseball and football equipment and any other articles which I found were desired by the men. I have always found that money spent in this way gave very good returns."

"Play and athletic contests are encouraged and to some extent are compulsory. A play period is part of the daily schedule. During this period the men take part in various games fitted to give quickness of mind and body under the supervision of their non-commissioned officers and one commissioned officer who is designated as athletic officer of the battalion. Also each company has its hour in the post gymnasium where the men wrestle, box, play basketball, etc."

"Games and athletic contests in the army are having more stress laid on them now than ever before. Each company is supplied with an athletic box which contains all the paraphernalia for all the leading American athletics. There is great rivalry between the dif-

ferent regiments and even the different camps, and it is encouraged in every way possible."

Appendix IX of Major F. R. McCoy's *Principles of Military Training* (Vol. III of Collier's National Service Library, 1917), gives a form for an "Order for Athletic Competition and Other Amusements," which bears out these replies and shows that the forms of amusement and recreation not here considered are various. There can be little doubt that officers who fully appreciate the importance of these aspects of the soldier's life will find them great aids in improving the general *morale* of the army. It is important to note that athletics, like other forms of training, must have a purpose and must develop snap and alertness in the men that will carry over into their more serious performances.

CHAPTER IV

TEAMPLAY

I

Closely related to competition and play, both of which are agencies of developing it, is teamplay, or teamwork as some persons prefer to call it. Every one knows something of what teamplay is and has at some time or other participated in the teamplay of some group or organization, but many individuals do not fully realize the great importance of teamplay in all forms of group activity.

Recently in conversation with an old experienced army officer I asked him if he laid any emphasis on teamplay in training his men. "No, I can't say that I did," was the reply, and it somewhat surprised me. Then he began relating some of the methods he has used in training his men. He said that when a new recruit came into the company he would place him in a squad and impress upon him the fact that he was Number Three, for instance, of that squad; that he must execute all the steps and movements required of Number Three; that no one could do it for him; and that if he did not do it correctly he would spoil the drill of the entire company. He made it plain to the recruit that the entire company was dependent on *him* to make certain movements for the effective co-operation of all. It is plain that this officer, while not explicitly realizing it, was impressing upon the new recruit from the very start the importance of teamplay.

Lieutenant Colonel Lincoln Andrews, U. S. A., in his work on the *Fundamentals of Military Service* says: "In battle, and in the preparation for battle, there are but rare occasions for 'individual plays'. Success may be obtained only through the most unselfish playing for the

team. And not only must the elements of each organization thus work together, but the different arms, infantry, cavalry and artillery, must often sacrifice brilliant opportunities and even meet local defeats, loyally working for the common good of the whole team. Thus each unit, from an army down to a squad, is considered and trained as a team, each under its own team captain."

Teamplay has always been one of the predominating features in the best armies. History bristles with illustrations of where individuals, carried away by the enthusiasm of teamplay, have made brilliant personal sacrifices for the good and welfare of their companies, and likewise where companies have attempted the impossible for the sake of the reputation of their regiments.

Success in any line where groups of men are employed depends mainly on the teamplay developed. This fact is quite apparent to one who has played football, baseball or basketball. Football perhaps furnishes us with the best example of this principle. We know that in the well-drilled football team, you have the physical strength and mental alertness and ingenuity of eleven men condensed into one unit, the team. Who has not observed the working out of this principle in a football game, wherein one team was composed of star players who had had little practice together as a team and the other team had had the benefit of a season's drill, with the teamplay that it brings? A visit to the gymnasium during a blackboard talk on football, will illustrate how each play is planned out, how each player has a certain thing to do at a certain time.

Our great American industrial enterprises that employ armies of workers have recognized the need and importance of developing teamplay and co-operation among their men. No better examples of this modern tendency are to be found than the Ford Automobile plants, the Harvester Industry and the Bell Telephone System, all of which have placed their employes on a profit-sharing

basis, which in turn awakens in the employe a desire to do the best he can for the welfare of the company. These companies constantly point out to their men the necessity of each doing his part without a hitch.

Teamplay, however, means something more than the concentration of effort. It leads to a fine spirit of friendliness among the men, to cementing together the bonds of good fellowship, and in the army to fighting spirit popularly known as *esprit de corps*.

The leader is fortunate indeed who recognizes the importance of teamplay and bends every effort to develop it among his men. In our army especially, which is composed of so many races of men from all walks of life, teamplay should be harped upon continually. Statistics show that a certain percentage of the men who are being drafted into the army have been taken over their exemption claims, and the best that one can expect on their arrival in the training camps is a passive state of mind, so it becomes incumbent on the officers to develop group enthusiasm and co-operation in the men as soon as possible, and there is no doubt that one of the best ways of doing it is to get each interested in his own particular company.

One of the first and most important duties of the leader or officer is to develop teamplay in his organization. President Wilson, on the entrance of the United States into the war, realizing the value and necessity of teamplay, called upon Congress to lay aside all internal differences and party lines and act as a single unit for the sake of the Country. It was teamplay that strengthened that small band of Belgians, making it possible for them to withstand for days the onslaught of the largest army that history had ever recorded.

II

A good way of stating the differences between a normal, efficient man and one that is mentally defective is to say that the co-ordinations of the former are better.

Let us think of co-ordination in the larger sense of the term. The normal man recognizes the demands of many conditions and prepares himself for them so that all his acts fit in together as a functional unit to bring about the ends desired and demanded under the larger circumstances. If, for instance, a pedestrian must get to some place at a given time and is hard pressed, this is the dominating factor in his adjustments. If a street is to be crossed on the way and he sees two or three automobiles in close succession that will get to the crossing just in time to stop him even for a few seconds, he speeds up to get over first and thus to save the needed seconds; if the sidewalk is crowded sufficiently to impede his progress, he takes another course even though this may slightly increase his distance. Every condition affecting his reaching the goal is thus quickly sized up and met in a manner to yield the best results for the end in view.

In the narrower sense, too, the normal, efficient man shows superior co-ordination to the defective. His balance, for example, is more finely adjusted. In walking and running he steps in such a way as properly to keep his balance and to interfere with his momentum as little as possible; too long steps and excessive swinging to the sides are automatically and unconsciously avoided, for these conditions bring about loss of energy in the resulting up-and-down and right-and-left changes of motion. His steps are uniform in length and rate and are properly gauged for the greatest efficiency, and each step is properly counter-balanced by appropriate arm movements and body adjustments. If he unexpectedly steps on something slippery, as a bit of banana peel, compensatory arm, leg and body movements so adjust the body reflexly and almost instantaneously as to keep the equilibrium and prevent a fall. In both the wider and the narrower sense, then, co-ordination implies making each act fit into the whole system of acts in such a manner as most effectively to bring about certain desired results.

Insanity, and mental deficiency on the whole, may be regarded as a kind of inco-ordination. This characterization of such defectiveness will hold with reference both to the larger aspects of consistency of adjustment to the physical and social world about one, and, in the narrower sense of the term, to bodily equilibrium and adjustments of finer movements so that they fit into the larger acts performed. This is strikingly brought out in play. The defects in both kinds of co-ordination referred to make the feeble minded unfit for play with normal children, and even among normal children there are enormous differences in these respects. On the playground a child soon finds his proper place.

Defectiveness shows itself so plainly in play because play usually assumes the form of games, the operation of one group against another; and the conditions of the games are such as to make obvious any superiority in either team or group. That is to say, the results are easily measured as the game progresses. Such plays, as we have already seen, demand a high degree of skill in subordination and co-operation. Accuracy and quickness of movement is demanded of each member. A failure of any one to play his part in any critical situation may lose the entire game. Who has not seen such pathetic results in baseball, basketball, or football? In play each individual soon gets a strong group consciousness. He becomes aware that he is a member of a group that must act as a unit. Success means success for all, and failure means that all must go down together. This makes each player intensely interested in the success of every other member. Each player is cheered if he makes an unusually successful play and is "bawled out," and possibly even dropped out of the team, if he makes an inexcusable failure. In the latter case the man is sacrificed for the good of the group. Such a condition and such *esprit de corps* compels each to train up to his very best. He comes to take a pride in his group or team and to

feel a very close identification of himself and his own interests with it. Under such circumstances inefficiency is easily discovered, and it amounts to failure in co-ordination, as described.

Just as co-ordination in individuals makes the main difference in efficiency even against odds of greatly superior weight and strength, so teamplay is one of the chief measures of efficiency in group contests. It may indeed outweigh greatly superior individual training in other respects. For an organization of men, with possibly machinery of various sorts, to be most efficient as a unit, each individual's acts must be so carried out that they will develop the least friction for the whole team and will allow of the most perfect co-operation of all the individuals and sub-units. Unified effort in such circumstances is what counts. Effort involving maladjustment between units may be very harmful and dangerous to the success of the group, even though taken in itself it appears to be intelligent and most efficient.

Unorganized effort of many intelligent individuals under unexpected circumstances makes these facts plain. A rush of such individuals in a frantic effort to do something in an exciting situation illustrates just the opposite of teamplay. In attempts to save themselves from a fire, for instance, or from a sinking ship, or to protect themselves against an invading enemy, the most surprising blunders are often made. Each person may be intelligent and even show self-control of a high type, but under such circumstances each one reacts directly to the situation as he himself sees it, so that one gets in the way of others and does what they are trying to do. Besides this, each person over-emphasizes his own personal interests in the situation. The result is fatal inefficiency, harmful to all. A body of well trained and well directed soldiers can hold its own against vastly superior numbers of strong men not trained to act together. This is particularly true today when warfare is carried on by means

of various kinds of highly specialized machinery and instruments of war.

Each soldier must get to look upon himself as a mere part of the great machine; he must learn to use his own judgment and initiative only within the limits allowed him; for the entire war machine in all its workings must be under the direction of some one commander who has constant and as nearly direct information as possible of the entire changing situation, including the movements of the enemy. Any assumption by a subordinate officer or soldier of the freedom of acting beyond the limits prescribed, even though made with the best of intention and with great personal patriotism and bravery, might lead to maladjustments and to the failure of the entire project, as well as to self destruction. One must learn to play according to the rules of the game just as is true in the case of football. Sometimes what one is ordered to do may seem unwise, but one must learn to respond to commands immediately and with the full force of one's own will. Only such an attitude will make for the general efficiency of the group, and enable the commander to do with the army just what he understands from his position of superior knowledge and information to be necessary. War is war, and when it is forced on a democracy every one's safety and good depends on the efficient operation of the entire army. Without such an attitude of whole-hearted surrender on the part of the soldier and subordinate officer, the commander cannot be held responsible for results.

The present war has shown a tendency, it seems, to depart from the reckless, fool-hardy individual courage, or mere bravado, toward greater surrender of individual responsibility to the commander, who then is held rigidly responsible to the people for results. Ferrari, an Italian writer who has investigated changes in courage in the present war, finds that, "It is only the novice in the trenches that shows bravado. In the first months of the

war, when an officer called for volunteers for a specially dangerous task, there were always twice as many as were wanted. But now the men prefer that the officer designate who is to go; all are prepared to go without hesitation, but only within the limits of the needful as determined by the officer; and the soldier prefers that the responsibility for special exposure rest with the officer rather than with himself. Courage has thus taken a less impulsive, more rational form." (Quoted from a review by R. S. Woodworth, *Psychol. Bull.*, 1916, 13, 420-421.) This change is toward better teamplay, as mere bravado, *to be brave*, could in no way add to the strength and efficiency of an army. To do readily and willingly what one is directed to do, employing in the task all the individuality and personal judgment at one's command, is less likely to interfere with the efficiency of the whole operation of the war machine than to attempt extra feats of bravery just to show one's courage. The change has evidently been forced by the necessities of the war conditions, and is in line with the putting of all one's individuality and personal judgment at the command of the leader who sees more clearly the entire situation and the individual's relation to it.

There are of course many circumstances still in which one is justified in exercising initiative and judgment and in assuming great risks on one's own responsibility. But the general principle of not allowing individual initiative to transcend the limits prescribed by the superior officer is important for the best teamplay, and it is not to be regarded as inconsistent with the principle of encouraging each soldier to show as much individuality and judgment as possible under these restrictions. The two principles work together in all successfully carried out group contests, such as football.

Teamplay involves specialization of function just as co-ordination in the individual requires eyes, nerves or impulse transmitters, muscles, circulatory system, lungs,

etc. First of all, when each man is well trained, there must be means of communication between all parts. It would be wasteful and confusing for each individual to transmit to his neighbor instructions coming to him by such channels. The better plan, of course, connects leaders of each unit with those of larger groups, and these again with men of still greater responsibility, so that the commands can come down from the centers of information about the entire situation. On the same plan reflexes and the similar individual acts of the human organisms are all under the control more or less directly of impulses from the cerebrum, which depend upon what the person sees, hears, etc. Teamplay, then, implies subordination of some individuals and groups to others, and of all to one head. In democracies this head represents the authority of all the people combined. But the main thing to emphasize here is that each unit must play its part so well as to work perfectly in the entire war machine. This condition is imperative and, as will be seen, is not incompatible in defensive war with the ideals of democracy.

Each leader should as far as practicable have full freedom of operation, of opportunity to express his individuality, within the sphere of his own command and of the program of co-operative action given him by his superiors, and should in turn allow the same privilege to his subordinates. Thus freedom is compatible with subordination in all ranks down to the private, each officer and man being, however, held strictly responsible for doing his part well. For the best interrelations of all units or individuals, opportunity for individual drills and criticism should exist in so far as they do not conflict with general drills and co-operative action or interfere with the prescribed program. This system of freedom within units encourages individual efficiency and initiative and affords the very best opportunity for competition among co-ordinate groups both in training and in actual warfare.

But such competition is profitable only inasmuch as it applies to co-ordinate units having similar functions. It becomes questionable in value if it is allowed to interfere with the necessary specialization in function of certain units, or, in actual warfare, with any of the outlined operations of the entire army. This freedom within the limits necessary for the entire army mobilization, moreover, affords means, according to the individual genius and initiative of leaders, of keeping up the spirits and of stimulating the loyalty of the soldiers. These matters will receive special treatment in other chapters.

The leader of each group must know thoroughly his subordinates and some elementary principles of the psychology of incentives to action. Even when men are well trained and efficient their response depends largely on the kind of stimulus they get and their personal attitude toward the situation. Attention is selective; it emphasizes some things to the neglect of others. To the cat a small moving object—a piece of yarn, perhaps, dragged by some one—is far more stimulating than are larger moving objects in the room. Nature has predisposed it to be sensitive to such stimuli; they may mean food, a mouse. Even in the case of man the selectiveness of attention leads to errors of view, to the exaggeration of the importance to the individual of matters relating immediately to himself; often it results in the neglect of remote opportunities and of activities making for the common good. One's effort, enthusiasm, and patience in the face of obstacles and danger, one's tenacity and general efficiency,—these things are determined largely by the particular manner in which each unit or individual is appealed to or stimulated, by the emphasis each aspect of the situation receives and not simply by the mere intensity or clearness of the commands.

Right here comes the opportunity for the leader of each group to show his best teamplay. In severe competition under critical circumstances, as in actual war,

where every muscle is to be exerted to the utmost to fulfill the task assigned the particular group, the leader or commander has it in his power to a considerable extent to decide the issue. A failure on his part may throw extra burdens on other groups and cause them to give way, and an entire battle of importance may thus be lost. Let no subordinate individual in the great war machine therefore regard his own part too meanly. The leader must keep mindful of the fact that men are not to be regarded as so many physical bodies each of so much weight and momentum; men are not *things* or machines in the sense that the pulling of a lever or the mere giving of a command will bring out their best effort. They are not to be thrown together and shuffled about as so many inanimate objects. In each human being energy is so stored, however perfect has been his training, as to be released and used under stressing and critical circumstances according to the effectiveness of the arousal of his instincts and his acquired attitudes and habits. Each individual is stimulated not only by *what* he sees and is told, but by *how* it is presented to him, by the implications of the situation as he gets it, by the attitude of others about him, by the amount of training he has had in the performance of the act under the given circumstances, and by what the act promises to him individually. The most efficient response is the one that can be made enthusiastically and whole-heartedly, with one's good will.

In view of these facts it not infrequently happens that to get the most out of a temporary opportunity leaders and directors of groups "play unfair," slightly misrepresent, make promises which they cannot fulfill, and so on. If such an attitude occasionally seems to bring good immediate results and thus to justify itself, this is only to short vision; for the temporary successes collapse in discontentment, jealousies, criticisms, conflict and final failure. The largest business corporations know this; they have learned by costly experiences that the ac-

cumulation of stimuli that are harmonious among themselves in the large, and consistent with a far-sighted and straight-forward policy, inevitably brings the best results in the end. Under such circumstances friction and contradictory incentives are reduced to a minimum, and each succeeding act strengthens the next by an accumulation of stimulus effect, called in physiology the summation of stimuli. Pretensions and promises which cannot be fulfilled arouse sporadic effort, which under the conditions cannot be sustained. Wavering activity results, contradictory impulses are set up, and waste of energy, even to collapse, results.

Teamplay demands not only enthusiasm and energy in well trained individuals, but for effective results it requires much practice in the interplay of the various cooperating units. Great exactness is necessary in the carrying out of orders so that no hitch will arise. Enough individuality in each unit is demanded to assure that if any part of the general plan miscarries as a result of unforeseen conditions or surprises, the maladjustment will not be insuperable and lead to confusion. It is obvious, then, that teamwork cannot be effective among groups that work mechanically with a small degree of individual initiative and intelligence. The individual involved must know something of the larger aims and the means by which they are to be obtained. They must be intelligent units in the system, ready and willing to understand directions and to adapt readily to modifications in the mode of attack or defence forced by the changing circumstances of an engagement, and able to act on independent judgment if by chance they become isolated from the main army.

In a real engagement a few individuals of poor ability or of unfavorable attitude are serious obstacles to teamwork. They must be eliminated. Mental tests and other means of selection by personal acquaintance and contact are great aids in the elimination of the unfit. Individuals

thus eliminated may prove useful in other capacities. Mental tests are now being applied on a large scale.

The inspiring influence and bravery of leaders and of comrades are invaluable in the developing of proper attitudes for teamplay. The advantages of a real democratically managed army, each individual fighting consciously for the common good, and content with the conditions under which circumstances understood by him compel him to operate, must be tremendous. Too much stress cannot be laid on these human phases of warfare. Armies driven against their own wills by autocrats, or hirelings not interested vitally in the outcome of a conflict, easily go to pieces in adversity. They lack the psychological backing and the bracing effects of circumstances that support democratic peoples fighting for liberty against aggression. It would be interesting to attempt estimates of the importance of these factors in past wars.

Sound education of the men in our armies of new recruits brought in by the draft is desirable. These men frequently come into the training camps with an attitude of passivity, in a few cases with actual inner opposition. Many of them have not had the associations and the education to bring them to a full appreciation of the democracy of their call to the colors. A large part of the preparation for good teamplay in the army will consist in bringing about the proper attitude in such men; not by direct instruction, of course, so much as by various indirect means, such as the effect of the general democratic atmosphere of the training camps and army life. Such atmosphere works gradually by indirect suggestion and reaches back by means of personal correspondence to the homes from which the recruits come, so that a general feeling of solidarity in the nation develops about the fighting men. Thus the attitude toward individuality and democracy gets to be of prime importance not only for the army's own internal operation and teamplay but also as a

means of securing the backing and co-operation of the entire nation.

Each soldier must be thoroughly and genuinely interested in his company and be anxious to guard its reputation, as a man works for the welfare of his own family. In games, as has been pointed out, the group interest and success comes out so strongly that each player becomes vitally interested in what every other player does, in how well he does his own part in the game. Enthusiasm develops when a successful move is made or a point is gained and the person playing the lucky rôle is cheered or encouraged by various other means. In the army this same idea of consolidating the group should be emphasized, the idea of getting each member personally interested in the other members and so bound up in his feelings and interests with the entire group that its welfare is vitally connected with his own welfare. Under such conditions each soldier takes a pride in keeping up his part of the game well; he feels keenly the responsibility of failures and the encouragement of individual successes. It is only when one's company is regarded as superior by one's self and by others that one is stimulated to the utmost effort to keep up its good reputation. Many a soldier who cannot be stimulated by the more remote appeals of patriotism to country or of loyalty to the cause in which he is fighting, responds readily to the more local and immediate appeals of the group; his attitude of love of the company and the identification of his own interests with its interests make him easily stimulated to his best effort by his immediate social environment. The desire to stand well in the estimation of his fellows about him, in his own social world, makes an excellent basis for control by group sentiments of honor and the *esprit de corps*, rather than by compulsion.

Definite rules for teamplay cannot be prescribed. We have stated some of the conditions necessary for its suc-

cessful and persistent operation. Individuals who show ability in organization and in the successful application of principles favoring teamplay will find themselves in demand, just as good coaches are sought for football and located by their results when competition is keen. We add, however, some suggestions from army men of experience.

III

The safety of each soldier and of the country rests upon the co-operation of all. In the great offensives of the west European front every detail is planned so that the gigantic war machine with its numerous specialized agencies can work at its greatest efficiency. "The American soldier," says Major McCoy, "must be trained by appealing to his common sense, with an earnest effort to encourage individual intelligence and excellence. The common knowledge of the great efforts of the contending powers on the western front has borne in on every one of us the complicated and desperate nature of every attack. We all know that superiority of fire must be prepared and maintained. Where the artillery leaves off, the infantry and machine-gun fire and throwing of grenades and bombing must keep it up. The communications must be maintained midst terrible confusion and soul-racking noise. No commands can be heard. The attacking lines must be handled by signals which presupposes absolute training and teamwork—the thorough co-operation between all arms. For the infantry to gain and keep the superiority of fire, every individual soldier must handle his arm instinctively and rapidly and be controlled and directed by officers and noncoms. The teamwork must function in the work, advancing and crawling by the unseen touch of training and discipline. The possibility must be attained of rushing forth from a line of shelter at a short distance from the enemy at any decisive phase of the combat. The sacrifice being resolved upon, it must be pushed through to a finish and the enemy

drowned under successive waves. It is our duty as officers to train men, both physically and morally, so that the attacks will be pushed through." (*Op. cit.* pp. 215 and 216).

Successive waves of assault are sent forward each to bolster up and protect the preceding fighters and to take and hold new sections of conquered ground. A more detailed account of one of these attacks will help the reader get a picture of the real struggle and the need of teamplay. The quotation is from a description by a foreign officer. We begin with the second line of attack.

"With the enemy all in disorder [after the wrecking of their trench systems by the artillery fire and after the first line has hit its blow], the batteries flee at a gallop before the tide which has carried away all the obstacles prepared long ago and judged impregnable; all confidence disappears; the adversary, feeling the resistance giving way around him no longer dares to hold out desperately, from now on the least thing induces him to turn tail. However, on some points reserves have come up, have manned their positions of the second line and have attempted some timid counter-offensive. Machine guns, rapidly brought up, are installed and fire with all haste to prevent access to the open zones of the defender and to gain time. The tottering resistance tries to hold on; now, one more great brutal push along the whole point like the attack of the first line, and then will come the desperate rout.

"It is then that the second line appears; starting out in its turn from the parallel, it advances by immense and successive waves of thin lines, calm and unshakable among the *rafles* of shells and spent bullets.

"Already numerous detachments of machine guns and light cannon have preceded it. Creeping through, following up the first line, they have been able to unravel the situation and take account of the points where the resistance seems to be desperate and needs to be imme-

diately swept. The light cannon orient themselves directly on the rattling of the machine guns, which they endeavor to overwhelm with a shower of their small shells.

“The accompanying batteries have started as soon as the first trenches are taken; they are soon oriented by the signals of the special agents of liaison—artillery men who follow the infantry. The remainder of the artillery cuts off the approaches by a barrier of asphyxiating shells and carries its fire on to the second line marked out according to the directing plan.

“Thus the second line arrives close up to the advanced elements of the first line under cover of sufficient fire. The second line pushes straight to the front on the objectives fixed long before and which should claim its whole attention.

“Certain of the units have a mission to block off the centers of resistance by finishing up the conquest of their exterior borders, while the great majority is absorbed in the intervals, instead of being halted and played out, playing the game of the adversary in his inextricable points of support.” (From Major McCoy, *op. cit.* 222f.)

The intricacy of the situation is such that much of the final and special training must of necessity be attained in close connection with actual warfare. It is of prime importance that the soldier gets a picture of the situation and sees the necessity of playing his own part well so that his own action and that of his unit may protect and support all those that depend upon it. Major General Geo. Bell, Jr., of the National Army, says in the letter to which we have already referred: “Each man must do his part and help his fellow man so as to bring about that perfect teamplay which only can produce an efficient military organization. Unless each part of the machine functions properly no machinery can do effective work. It should be impressed on every man that the rôle of every one is of the highest importance to the success

of the whole and that it is only by the willing and instantaneous contribution of each that the army can be made an effective weapon and it is only when the army is an effective weapon that success can be achieved and national existence maintained."

"In the artillery," says Brigadier General S. M. Foote, "I think we have perhaps a better opportunity than in some of the other branches to teach teamplay because we work always in 'teams.' The detachment of cannoneers, for instance, that work a gun, must work together like clock-work, no two men doing precisely the same thing. During ordinary drills it soon becomes impressed upon each man that a mistake made by him affects the work of the entire detachment. One advantage derived from the accurate, close-order drills on the parade ground for infantry, in fact I may say for all branches of the service, is that where all are required to do the same thing at the same time the appearance is such that a single mistake can be readily detected. While these drills may not in themselves be so very valuable for war purposes, they are valuable incidentally in teaching the paramount element of teamwork."

There can be no doubt that the way to learn teamplay is to do actual work in a team, and we are pleased to have this so well illustrated in General Foote's quotation.

Mere formal drills in which all do the same thing at the same time without evident co-operation for the attainment of some practical end do not in themselves develop teamplay or give a good idea of it; besides giving training in the performance of certain acts, manipulation of instruments, etc., that may be necessary in teamplay, they only enable the trainer to see readily, as was pointed out in the quotation, the failure of any one to learn his movements. Such failure does not, however, show the seriousness of failure to do one's part in the teamwork of an army in real action. We take it that General Foote's last sentence does not necessarily commit him to a view differ-

ent from this. Every means should be employed by the trainer to let the recruit take actual part in teamwork in various kinds of group competition. In the latter part of the soldier's training period he gets the opportunity of coming into contact with teamplay in actual warfare. Herein lies the prime importance of having the final training in Europe under the direction of officers in immediate contact with the work of the army in its ever changing methods. Gradually the soldier can become initiated into orienting himself among the dangers of modern warfare with its smokeless powder, its sniping, its raids, its poisonous gases, etc.

In the training camps teamplay is generally regarded as of prime importance. The soldier is taught that his own work, and that of all the other members of the team, may be very good from an individual standpoint and yet absolutely futile if it is not made to fit into the general purposes of the group and its successful operation from the standpoint of a unit body. Athletic performances seem to play a prominent part in the actual training in teamplay. Contests of various sorts not only develop considerable skill in co-operative activities, as we have already pointed out, but they also create a great deal of interest in the group itself and its success, an interest that for the soldier becomes closely identified with self-interest. Competition of various kinds requiring skill in the handling of arms,—accurate shooting, effective bayoneting, grenade throwing, etc.—and mock wars with charges, defenses, etc., involving an imaginary enemy, afford means of developing teamplay, but these means are after all only the first stages in the preparation for actual war conditions, the complexities of which have become so great and the special lines of work so various that there is almost no end to the amount of teamplay possible. These extreme complexities must never be lost sight of; they afford unlimited room for any especially well-trained com-

pany or larger group to distinguish itself and they serve as encouragement to extreme industry in training.

Teamplay is greatly improved by personal attention to individuals and to maladjustment of various kinds. For such attention some men have special genius. While general rules are not of much service in this connection, an illustration of the resourcefulness of a young officer may serve to indicate the principle in mind. Among other means he says that he seeks to develop teamplay "by studying the habits and traits of my officers, by removing causes of friction between them, by instruction along uniform lines, and by assigning as much as possible congenial work to each. For example, one of my officers is a university man who has been a teacher, and who is a student of psychology and English literature. I find him an ideal instructor for the foreigners in the company who are being taught English. Another officer, who has a taste for medical matters, does very well as an instructor in hygiene and first aid. One of my non-commissioned officers is an ex-prize-fighter, and he is invaluable as a boxing teacher. Teamwork is most important; an organization cannot be effective without it."

Finally, it is doubtless well never to lose sight of the motivating factors of which we have already spoken. Teamplay is enlivened, and the soldier becomes alert and vigorous in the performance of his own part, only when self-good is never lost sight of and when natural innate tendencies are more or less directly stimulated. For the soldier the war is not merely a struggle for what he regards as just and right; it is a big game in which he has become a participant, a game that affords unusual opportunities for him to distinguish himself if he thoroughly learns and practices its methods, but which may quickly eliminate him and bring reverses to his cause if he is careless about its technique.

CHAPTER V

LEADERSHIP

I

We have considered some of the instinctive bases of behavior, and their operation in competition, play, and teamplay, and also the necessity of emphasizing these factors to secure the greatest development and efficiency in the army. Now we come to the team captain who must embody the foregoing principles in the work of training and drilling his men.

The team captain or leader is the man who is responsible for the building up of an efficient company, for to kindle the fires of loyalty, teamplay and enthusiasm within a company the spark must come from the top. The government has gowned the officer with a mantle of authority, which if properly exercised will result in the forming and molding of real soldiers from the men placed in his command. Nowhere in civil life does one find any power analogous to that of the officer over his men. How important is it therefore that that power and influence be the best and be applied in the most efficient manner. The very thoughts of an officer will color those of his men, his actions will be guide posts for theirs. He is to his company what a father is to his family; he must teach them, discipline them, console them, sympathize with them, share their hardships and judge their actions.

It is reported that a German military authority has made the charge that the United States is making civilians into officers by merely pinning epaulets on their shoulders. This of course is not true, for the forty-five thousand citizens who received commissions in 1917, and the thousands since then, have been put through a severe

testing process, and have received some very intensive training. It is true that they were not chosen solely as a result of their efforts and attainments at the various training camps, but in part on the potential possibilities in each man, and the controlling factor in choosing the men for officers was their ability to lead men.

The success of an army more than of any other organization is built upon the foundation of leadership. Each squad, each platoon, each company, each regiment and each division has its leader. Moreover the company becomes what the officer is; that is, his personality is reflected in the company; and the company will develop the same degree of enthusiasm, loyalty and fighting spirit that is felt and exhibited by the leader. There is no better example of the power and influence that a leader exercises over his men than the historical incident of "Sheridan's Ride." One can just imagine the force and influence that Sheridan must have had with his men. There was the army in disorder on the point of flight, spirit broken, *morale* missing, the anxious officers trying to stay the retreat and longing for the commander who had always led to victory. Then followed Sheridan's ride from Winchester, twenty miles away, and with his presence came new hope, spirit and enthusiasm that rejuvenated the men and resulted in turning defeat into victory. Napoleon, Cromwell, and Andrew Jackson were leaders in the full sense of the word and had the same sort of powerful influence over their men. They always impressed people with a conviction of confidence and expectation of success that carried all before them.

In time of peace we have seen the importance of leadership on every hand. In commerce, business, politics and athletics one sees thousands of examples where individuals have accomplished extraordinary deeds by means of their leadership. Men like E. H. Harriman, James J. Hill, Wannemaker, Carnegie and Schwab have built up great business enterprises by influencing the

thoughts and securing the allegiance of thousands of men, very much as the action of great magnets draw iron shavings to them. In politics we know that each community has its leader, the man who welds together the individual thoughts of the people and brings about organized effort. In athletics also we find that success comes most often to that team which has the most skillful, aggressive and enthusiastic leader. On the football field especially, which is as close as you get in athletic contests to warfare, I have seen the captain of a team literally gather together the scattered efforts and energies of his teammates and combine them into one forceful unit, thereby winning the game. Ted Coy's feat at Yale during the Yale-Princeton game, several years ago, will stand out for some time as one of the best examples of this in athletics. The game had been going against Yale, and though Coy was captain of the team the coaches had been running the game and had withheld the leadership of the team from Coy. During intermission between halves, the great half-back pleaded with the coaches for the reins of leadership, and they finally yielded to his demands. Those who saw the game agree that he put new life and vigor into the men and, to the great surprise of everyone, led his team to victory.

In the present war the importance of leadership has been illustrated in every great battle. A short time ago I had a talk with Lieutenant Paul Perigord, of the French army, who has been sent over here by his government to help us prepare for the conflict. I asked him about the French officers; he said:

"The most successful French officers are those who in the greatest degree inspire confidence in their leadership, who are kindest to their men and who are the real friends of their men. It has been leadership such as that that has led our men to victory."

British army men visiting in this country tell me that by setting an example for their men in the way of acts of

bravery and daring, the British officer has so won the respect and confidence of his men that his leadership in battle is one of the greatest factors for success.

II

Leadership is one of the things resulting from a happy combination of various traits that is hard adequately to describe and analyze. It unquestionably depends largely on innate qualities. Some men seem to be natural leaders while others with much training are not successful leaders and managers. But while this is true, we are not to conclude that any given individual cannot be improved in leadership by proper knowledge and training. He unquestionably can be improved considerably in *some* of the qualities making for leadership, if not in all of them.

The consideration of leadership raises the question of personality. What is a person? It is not merely the physical organism we see before us in the case of any man. A friend or any acquaintance exerts an influence upon us that is different from that of a stranger. The stranger has many qualities not known to us; in a sense he "keeps us guessing." We do not know how he will react to this and to that idea or suggestion, or how much reliance we can place in what he says. He is mostly an undetermined quantity. The acts of a person well known to us, on the other hand, can be anticipated; his likes and dislikes, his ideals, his way of reacting to most things we may do are known. We know him as an individual who will do certain things under given conditions. This anticipation or knowledge—not simply his physical being, with complexion, age, size, and so on—is his personality to us. It may get to be almost a mere habit in us to expect certain responses, a matter that we really do not think of and of which we are hardly conscious ourselves. It is this anticipation of their reaction that stimulates dislike for and avoidance of some individuals and that makes us expand with optimism and courage in the pres-

ence of others. Some persons, because of what they are known to stand for, stimulate us to eagerness for co-operation and self-sacrifice; in their presence and under their influence there is almost no end to the effort we are willing to give and to the hardships we will endure. It is true that the mantle of authority bestowed by the government has something of this effect upon us, but it is well known that an official is sometimes hated and avoided. He is obeyed in such cases only because of our respect for the government, or for the will of the people which he represents, but is disliked in spite of his authority. Authority coupled with real leadership adds to one's influence over others, it is true, but in such combination the authority is always in the background. The real leader does not ostentatiously display his authority. Leadership is not something that can be bestowed upon an individual when he is made an officer; it is something far more subtle and more difficult to understand than this. But we all recognize the real leader when we meet him, and we yield even more thoroughly and naturally than to *mere* authority, for which many people have a secret dislike. The poor leader, the little-souled, selfish official, unwittingly arouses antagonism and discord. The natural leader avoids any show of compulsion, yet in his presence opposition fades as the mist before the sun.

Leadership, like reputation, is something that gradually builds up about one, some intangible quality that is worth an immense amount to a man; it makes one sought by all sorts of industrial, social, and political organizations. But it is not merely an attitude aroused in others, a habit of respect that is built up, but is founded on some real personal qualities that bespeak self-confidence and expectance of recognition. Even among total strangers the natural leader will soon stand out with unusual personal influence. There are manners about his behavior that compel recognition and respect. We cannot help observing and taking note of the leader. It is

immensely worth while for the young army officer, both commissioned and non-commissioned, to think somewhat of the characteristics of these manners. Leadership may express itself in different lines, in science or thought, in art or feeling, or in executive ability; one man cannot stand out above the common man and inspire confidence in all lines, though leadership in any one of the numerous human interests usually has much in common with leadership along other lines. We are concerned here chiefly with leadership as it shows itself in the successful handling of men.

First of all, as Professor Cooley says in his admirable chapter on "Leadership and Personal Ascendency," the leader "must, in one way or another, be a great deal of a man, or at least appear to be. He must stand for something to which men incline, and so take his place by right as a focus of their thought." (*Human Nature and the Social Order*, p. 293.)

The military leader is not merely well trained and impressive in his physical appearance. He must of course have these qualities; he must have an erect, positive bearing and an ease and decisiveness in his acts, incorporating the prestige of the military formalities and manners; he must be a real soldier. These physical manifestations of the soldier he must have ground into himself until they are second nature. But this is not all. He must know the whole military game, the more of it the better. Continued leadership is impossible without thorough knowledge of the matters in which the leader directs, and without efficiency in their execution. While it is true that the leader and the genius are probably oftener born than made, this does not mean that greatness comes without work. Quite the contrary is true; the leader in any line, besides having other good inborn qualities, usually has more energy and continuity for real work and more ability to stick to the problem at hand in the face of opposing im-

pulses than the so-called average man. The military man is the leader who *acts*, who acts with positiveness and self-confidence grounded on knowledge and discipline. For action that is to count and not ultimately to contradict and thus to annul itself there must, of course, be thorough knowledge of the conditions acted upon.

But this knowledge must be of concrete practical matters. The leader of men in practical affairs is not the man to allow himself to be blocked by opposing theories. He boldly strikes out, when he gets the situation in mind, and does things. His mind is made up usually before he takes command of a situation. In his appearance before others, misgivings and uncertainties as to this or that policy are not in evidence; such behavior would invite contradiction and lack of confidence. But instead there is a fine sense of reaching the point of "diminishing returns" on controverted matters, and differences of opinion of small practical import for the problem in hand are disregarded because they are easily outweighed by personal attitude and decision. There are usually several good ways of doing anything complex; once one way has been chosen the others may well be dismissed from the mind and this one carried through with unwavering confidence. This is the point of view that finds expression in the manners of the leader. "Into the vagueness and confusion that most of us feel in the face of a strange situation, such a man injects a clear-cut idea. There is a definiteness about him which makes us feel that he will not leave us drifting, but will set a course, will substitute action for doubt, and give our energies an outlet. Again, his aggressive confidence is transmitted by suggestion, and acts directly upon our minds as a sanction of his leadership. And if he adds to this the tact to awaken no opposition, to make us feel that he is of our sort, that his sug-

gestions are quite in our line, in a word that we are safe in his hands; he can hardly be resisted." (Cooley, *ibid.*, 297.)

Anything that reflects insincerity or lack of confidence in his own ability to master the situation is fatal to the influence of the leader. The lack of genuineness is hard to conceal. It is only the man of real qualities, with nothing to cover up, that can be perfectly frank and straight-forward in his relations with his men. It must ever be borne in mind that the influence we exert over others is a result of the many things that we say and do, and that are reported of us by others, and not simply of our physical presence and the tone of voice at the time of giving directions. Personality, as we have seen, is the accumulated effect upon one's self and others of what one has done in the past; and what one may do in the future, or on any occasion, is suggested to others more by this than by any present demonstrations one may make. Who has not wondered at the courage of some small boy standing unmoved by the threats of his father or mother and the display of wrathful power, only to see later that the boy had actually nothing to fear? He was stimulated not simply by the present threats and gestures but by their lack of enforcement in the past. Gradually and almost unconsciously each of us is building up in the attitudes of others about him a sensitiveness or lack of sensitiveness to what he says and does, depending on the consistency with which he acts, and on the degree of certainty with which what he says will affect others. This is the point of fundamental import in discipline. All the little events in our lives are gradually but surely accumulated into a disposition or a character and a social status. Thus gradually and in the main unwittingly each of us limits or expands his own personal influence. It is our whole past that speaks when we address others or give them

directions and this is why leadership requires, at any rate in the essential matters for the case in hand, real manhood, energy, and persistence.

We do not continue to hold in the highest esteem the man whom we perfectly comprehend, whose behavior in any given situation we have learned fully to anticipate. Even strong, personal friendships flourish best only on constant revelations of new and yet undiscovered qualities. Monotony in relations of friendship breeds lack of interest. We are interested in general only in what directly or indirectly tends to affect us. Complete ability to anticipate how one will react to a situation soon makes an appeal to our curiosity impossible.

The good leader is therefore usually not too communicative or talkative. He need not be exclusive or secretive or inscrutable, though some leaders are, particularly in undemocratic countries and institutions and to inferior classes. The commander likes to think of himself as a leader of real men not of some inferior sort of individuals, therefore he respects these men and their individualities. Many influential leaders are refined and considerate in personal relations, interested in the welfare of their men and by no means imposing or dominating in social life. One naturally thinks of Grant in this class. Strong friendships are thus built up and personal antagonisms are removed. Under democratic conditions high personal esteem and close acquaintance cannot detract from leadership but there can be little doubt that a too complete revelation of one's self, of one's ideas and plans, in personal associations gives others a great advantage over one and thereby interferes with the best leadership. Official matters, of course, have only certain channels of communication, and freedom with such matters in private conversation with subordinates should not be confounded with democratic association and personal in-

terests. Real leadership, it is important ever to keep in mind, must be based in a good measure on actual superiority, and requires regular, hard work and constant planning by one's self.

The successful handling of men demands consistency and directness of action. Enthusiasm and genuine sincerity impress others with the importance of the work one is engaged in and call out greater effort. One of the most effective methods of influencing others is to look for points of community of interests with them, for this brings about similar attitudes and shows itself in the army in the general devotion to the common cause known as patriotism or loyalty, of which we shall speak later. The man whom we can follow with the greatest confidence is the man whom we feel embodies our own ideas; he gets out sympathy and co-operation. This attitude of loyalty depends more on the general conduct of the officer than on what he says officially or otherwise. The indirect method of injecting it into one's subordinates is doubtless the most effective. The leader can never afford to reflect anything but high ideals and consistent, sound character in all his associations with men, for the official John Doe cannot easily be dissociated in the minds of others from the unofficial John Doe.

In official relations one cannot afford to tolerate familiarity or assumed personal advantage by anyone, based on former social relations. A mere look of surprise at any such encroachment on real business, or perhaps a short pause until perfect order is established, is usually a very effective way of putting down any presumptions on personal friendship. The commanding officer is responsible to the government for what he says and does officially, and is not acting in any personal relation that can allow of favorites in the sense of partiality. All special favors must be on the basis of service and efficiency. A strict holding to this principle will mean much to the young officer in securing good disci-

pline and influence over his men. It is nothing more than an attitude of profound respect for his high calling and his work. The principle is to be practised in one's behavior and in no sense ostentatiously; not a word need be *said* about it.

The successful leader and executive does not speak with hesitancy or doubt when he gives his directions. He wastes no words on inattention or on repetition of orders. Directions are given with implied confidence that they will be carried out efficiently and cheerfully even though such compliance with them involves great danger or risk of life. All the best qualities of a real soldier are assumed of each man, and this gives mutual confidence and courage. Orders should, of course, be given with sufficient clearness and definiteness and brevity to leave no doubt as to their meaning. The giving of many orders without scrupulous care as to their being carried out cannot but result in ultimate carelessness as to their fulfilment.

The successful leader is a hard worker, never allowing anyone under his command to know more about his work than he does; he comes to his official duties prepared to meet emergencies and to anticipate any possible difficulty that may arise. He understands human nature and knows that each person can best be stimulated in directions that accord with his own instincts and self-good. The leader therefore respects individuality, and skillfully identifies remote self-good with common welfare, and he shows by his own attitude and conduct that he is but representing the will of the people. He does not forget that some of the more remote and abstract ideals which give direction and meaning to our larger activities, are far less effective bases for stimulating many men than are the more immediate impulses connected with the desire to stand in well with the members of the local group. He is mindful of the strength of *personal* appeals, but he effectively embodies these more abstract principles of justice and patriotism to the country's cause.

Planning while others sleep prevents sleepless nights and breeds self-confidence. The best leader never rests on his oars; he constantly and incidentally reveals knowledge and insight beyond the anticipation of his men. Good leaders are never perfectly determined quantities. There is no royal road to leadership for it demands not only superior ability, but hard work, sincere living, and a high regard for justice and individuality. There can be no question that careful attention to these matters and persistent attempts to embody such characteristics in one's own life and work will greatly improve one's leadership and influence.

III

The first rule or suggestion to follow in order to be a successful leader is to know more than your men. Superior knowledge is necessary to win the confidence of one's men. This can only be secured by hard, diligent labor. If an officer is about to teach a company of new men the fundamentals of infantry drill, he will do well to get out his *Infantry Drill Regulations* and review everything pertaining to infantry drill. It should be made a rule never to appear before the men without being prepared, for a leader will not only lose the confidence and respect of his men if some one in the ranks knows more about the subject than he does, but he will appear ridiculous to them.

The leader in order really to lead must be popular in the better sense of the term with his men. Lieut. Col. Lincoln Andrews in his work on the *Fundamentals of Military Service*, has the following to say in regard to the popularity of a leader: "It is proper that you should aspire to popularity, to be beloved of your men, to be one of those leaders of whom it is boasted that their men would follow them anywhere." Popularity, however, is something that will come itself if it is merited, and while it is essential to the success of the leader that he be popular with his men, yet in his actions and words he should

not convey the impression that he is courting popularity. Real popularity is not attained by showing favoritism or by overlooking mistakes. Popularity gained by such methods is not lasting and will not stand the acid test of experience. The only solid, enduring popularity is that gained by exhibiting the qualities of justice and fairness in one's dealings with men.

Another thing which will aid materially in winning influence among the men is to study their point of view, mentally to "place one's self in their shoes" and thus to avoid the mistakes of misunderstanding the men, and the most natural and best methods of training and teaching them naturally occur to one. The English officers, despite the popular notion that prevails about the strict lines drawn between the men and officers, have been admired and adored by their men, due to the courage and bravery exhibited by them. A French officer, who is at the present time lecturing here for his government, related a very interesting incident of how he had won over his men's confidence and respect. His company was occupying a sector of the front line trenches and it fell to his lot to detail a soldier to perform a perilous mission, which necessitated his traversing a section of "no man's land" over which a heavy shell fire was falling. The poilu looked at the officer and said: "Sir, do you realize what it means to go out there?" The officer felt that his discipline would be weakened if he argued with the man, and he knew that some drastic measure had to be taken. He looked out over the parapet of the trench and as he watched the falling shells he noticed that they were falling in well defined lanes, and the idea came to him of picking a path through the shell fire. He turned to the poilu: "I suppose you will risk it if I accompany you out over that hill." The French soldier protested against his lieutenant going to certain death, but the officer insisted on accompanying him and so they started out. The journey out and back was made without mishap, and on his

return to the trench the officer's men literally hugged him in true French fashion, kissing his hands and hanging onto his knees. The incident had the effect of winning the confidence and the respect of every man in his company, and from that day on he never had to select another man for a perilous task, for men in the company willingly volunteered whenever occasion arose. Of course spectacular exhibitions of courage such as the foregoing are not usually necessary to win popularity among the men or even wise as a rule, but it has been common knowledge that the French and the English officers have set the pace for their men. However, the most important thing to keep in mind is the necessity of fair and impartial treatment of the men. In assigning work it is important to see that each man does his share, and does it in strict compliance with orders.

In drilling and teaching his men the efficient officer will always bear in mind the fact that the average man takes pride in doing his work well. When the work is digging a trench he will find more interest in his work if it is properly directed and is well done; when it is company drill the men will enjoy it more and find more interest in the performance of the drill if it is snappy and performed in proper manner. And the application of this principle is made by keeping a close watch on the efforts of the men, rewarding deserving efforts with a word of praise or correcting their mistakes in a definite, manly way. The men cannot help but feel elated over doing their work well, and the leader makes a mistake if he thinks he is pleasing them by allowing them to slop through their work.

In handling men the leader must bear in mind that he is not only the leader by right of authority but that he must be the leader in fact. He must set the pace and the men will look to him as an example. If he is taking the men on a hike his place is at the head of the column; if the path carries them over rough, difficult pieces of road

he must lead the men over these places. In action, regardless of how he really feels, the leader must be so trained and self-disciplined that he can put up a fearless, unexcited appearance. If he appears frightened the same state of mind will be communicated to the men; if he is perfectly at ease and complacent under the circumstances they will quickly fall into the same mental attitude.

One of the most important factors in the make-up of a successful leader is his ability to make decisions quickly and to carry them out in a commanding manner. A leader is helpless before his men if he shows any hesitancy about what to do under any circumstances that call for a quick decision. Decisiveness in action can be developed to a certain extent while in garrison training. Circumstances are always arising which call for quick decisions, and while it is desirable to make the best decision under the circumstances one must sometimes sacrifice the value of reflection for speed.

An officer to become a leader of his men in the full sense of the word must not only give them commands, direct their efforts and teach them military science, but he should also look after their material needs; he should watch their mess, and should see that they are well outfitted. In a word he must be something of a father to his men. In return the men will develop a warm regard bordering on affection for their officers. It is human nature to strive to please those who are interested in us, and the men will quickly learn whether or not their leader has their interest at heart.

One thing the officer cannot be too careful about is the giving of orders. In the first place he should limit the orders to as few as possible, and they should be given neither in a harsh nor in a pleading tone. Nagging the men or treating them as if they were servants can have no result but that of arousing antagonism of some sort, and on the other hand the officer is charged with responsibility regarding matters under his own command that en-

ables him confidently to expect the carrying out of his orders. Orders can be so couched that they assume willing co-operation and indicate that there is in the mind of the officer no uncertainty as to whether they will be obeyed. It is important to see that every order is promptly and intelligently carried out to the letter, for if one gives leeway the habit of allowing slight omissions to occur will grow until these omissions border on insubordination, and for such a condition the officer only, on the last analysis, is responsible.

“The American soldier,” says Major McCoy, “does not like the French familiarity nor the English patronizing ways, and intercourse should be in keeping with the customs of the service. The popularity seeker, or freely familiar officer, soon acquires the disdain or contempt of his men. If he is going to lead them in hard times and have their willing and instinctive respect in following, he must exercise a quiet patience and an insistence on their rights and privileges, and a keen interest in their comfort and welfare. The intimate service in the field will give him every opportunity for showing this. It must not be forced.

“Self-control is the most important faculty of command over Americans—an even tone of voice and a quiet, cool way. When you speak to a man, use his name, never the old-fashioned terms of ‘you man’ or ‘my man’ or any other patronizing expression or tone of voice. Show a lively interest in everything that is going on in the way of both work and sport, and cultivate the utmost discrimination in giving rewards and punishments.

“Study the temperament and characteristics of your men, and remember that punishment itself is not an end but a means for better work and particular reform. Be sympathetic but not soft-hearted at the wrong moment. Remember that enlisted men in barracks are not ‘plaster-of-paris saints,’ but have all of the little faults and at the same time the fine loyalty and often splendid qualities

of the young American. Most of your soldiers are not much more than boys, and they should be handled as such.

“Your heart will warm particularly to the noncoms. They have been tried by fire and are usually a splendid lot and stand by you through thick and thin, and it is one of the finest experiences of the service to go through hard times with them.” (*Op. cit.*, 143, 144.)

Major General George Bell, Jr., in the letter already referred to, says: “It is impossible to reduce to rules the proper method of dealing with large bodies of men because the personal equation so greatly modifies various cases. With some, sheer force is the only way to compel obedience; with others tact; with others persuasion, etc., but a very potent influence can always be exerted by the appeal to reason and by showing men who possess ordinary intelligence that there is a very well founded reason for certain customs and practices in the military service.”

CHAPTER VI

THE PRINCIPLES OF LEARNING

I

The change in the life of the civilian which is to make him into a full-fledged soldier is fundamentally a matter of learning, and when one contemplates the enormity of the task before the Government in changing so radically the lives of millions of men in the short time available one sees the importance of having the officers upon whom this work devolves approach the work as intelligently as possible. The officer in the training camps becomes fundamentally a teacher.

A large factor in the success of any organization in most lines of activity is the degree of efficiency applied to the methods of teaching its members the tricks of the trade. Most of the large industries realizing the truth of this fact have long since discarded the merely haphazard method of breaking in their employes. These firms now employ the best talent in the country to evolve the most efficient ways and means of teaching their men and they frequently incorporate these principles in short courses to which the men have access before taking up their work within the firm. In many cases a great deal of consideration is given to individual differences among the employes, backward individuals being given special coaching and instruction and every man being put into the service for which he is best fitted by nature, as far as this is possible.

In many different fields the essential elements of learning have been so carefully analyzed as to enable the learner under scientific direction to advance much more rapidly than he could otherwise do, and to reach a higher point of efficiency. The brick-layer, for instance, is far more efficient today than he was a couple of decades

ago; he has learned just how to use his muscles, tools, and materials to practically the best advantage. The same is true of the workers in many other lines of the industries to which scientific methods have been applied. Wherever premium is put on the accuracy and quickness of highly co-ordinated movements and on the co-operation of many hands, better analysis and consequently great improvement is bound to take place. It is accuracy of testing results and high rewards for the best results that bring out improvement in methods.

In athletics these conditions usually obtain; contest has put a high value on efficiency, and results in their grosser features at least are easily determined. As a result of this we find that in the various specialized lines of athletics the methods of training have been greatly improved. While most of the older generation spent a long time during several summers learning to swim, as boys left to themselves still do, it is now possible for an expert by emphasizing and calling out the most efficient movements to teach one to swim in a very short time. The same thing is true of skating. Without expert assistance one may spend several winters learning to be highly efficient, but a good instructor will enable one to show surprising improvement in a dozen lessons. This is due to the fact that such instructors in various highly specialized performances have found just how best to emphasize the most efficient movements that one makes in the early trials and how to eliminate with the greatest advantage all unnecessary movements. The athletic coach of today teaches the runners to utilize every ounce of muscle in their strides so as to avoid placing any extra burden on certain muscles and thus to bring on fatigue too rapidly. In rowing the coach instructs the beginner to equalize the exertion of each stroke by distributing the work over all the muscles of the body; and, everything else being equal, the crew which has the smallest amount of lost motion in the strokes wins the race.

In the field of education much progress has been made because of the fact that more accurate methods of measuring results have been worked out and also because better means of analyzing the processes are thus afforded. In this field, however, there is yet much to be learned, for at the present time the emphasis is put chiefly on methods of measuring results and of testing the individuals for better classification. Greater emphasis on improved methods of learning is bound to come as a result of the accuracy with which results of different methods can now be measured. At present there is unfortunately a tendency to neglect motivation methods in the mere routine of the drills.

It is highly probable that great improvement in the methods of training recruits are to come, particularly now that time is a most important consideration and that the most efficient officers are everywhere so much in demand that much of the work of training will necessarily be left to younger men. Many young officers will find themselves charged with responsibilities that will compel them more or less to fall into mechanical and stereotyped procedures. While the various movements in formal military drill are rather uniform for all the men, there are under present practices excellent opportunities for the progressive officer to put individuality and snap into his work.

I recall one young officer who conducted classes each day in guard duty. During the various sessions that I attended this instructor never resorted to illustrations in explaining the many different phases of his subject. A number of questions and difficulties would come up each day which could easily have been cleared up by the use of a few apt illustrations. With a few suggestions such an officer might greatly improve his efficiency. On the other hand I have seen officers who made their subjects so clear and interesting by means of illustrations, and provided so well for proper motivation to real effort, that

students were enthusiastic and made excellent progress. As better methods of measuring results develop and as the demand for the best officers increases, as it is certain to do during the progress of the present war, such differences will become more and more marked and the efficient officer will find himself at a tremendous advantage.

The great improvement that regularly shows itself in learning when the most efficient methods are employed was illustrated in the increased rate of progress made by the students of the second officers' reserve training camps over that of the students of the first series of training camps. It has been freely admitted that in the second series the students covered more ground in the first three weeks than was gone over by those of the first series in five. Too much stress cannot be placed upon the necessity of the selection of the most useful procedures by the officers who are to train the recruits, and there can be no doubt that an intelligent understanding of the principles underlying learning will be very helpful to those who have this important work immediately in hand.

II

Few animals are born with instincts and dispositions that fully meet the needs of their environment. The acts of some animals are much more nearly pre-determined by their inherited structure than are those of others. In many cases reproduction is on so large a scale that many of the individuals may be eliminated by slight errors in response and still enough of their fellows will by chance survive for the continuance of the species. Certain types of animals have so short lives, or live in environment (*e. g.*, water) where changes are so slight, that there is little need of modification of their behavior. But higher animals, living through many seasonal changes, are usually more plastic so that they can become accommodated to the changes of conditions about them, or acquire habits of their own which will supplement the original instincts. In general such changes brought about in in-

instincts by shaping them for individual emergencies are what we call habits, and the acquiring of the habits is *learning*. To learn is to modify one's instinctive ways of responding to given circumstances so that the results of the acts will be more favorable to the life of the individual himself, and therefore to his group. In plastic animals, like man, all instincts have to be trained more or less for normal functioning.

It is of course true that not all acts learned are helpful to the individual in the long run; many habits acquired under local or temporary conditions even hamper the individual later in larger situations, and operate against the acquirement of more valuable habits. But our point is, that for the proper motive to exist in the formation of habits in men we should not get too far away from the stimulation of the original instinctive tendencies, tendencies that predispose the individual not only to act in certain ways but to be interested in matters affecting his own welfare. The good teacher and trainer never forgets this; he consequently gets better effort and less inner resistance. The instructor who is to be most successful, therefore, in the training of others must keep in mind some of the elementary principles of behavior; he must not forget that external stimuli to effort or activity are means of bringing about action because *they are related to inner needs and to instinctive tendencies of the individual organism*, and because they somehow give expression to the innate dispositions of the individual. The writer one time had a special student in arithmetic who made wonderful progress. He was a life insurance agent, and was promised a considerable increase in salary at a certain date, provided he could be ready to assume the more difficult duties going along with the higher position. For the new work he was deficient in mathematics. His learning activities were therefore motivated rather directly by strong instinctive tendencies, and he made rapid and cheerful progress. The instructor in the training

camps must give the learners a vision of what the acts to be learned lead to; he must give them perspective so that their instincts and ambitions can play into and through the activities or formalities to be acquired. This enlivens and gives spirit to the work, and furnishes motive for hard individual efforts. Where other motives fail rivalry or emulation, as we have seen, may be utilized; these are impulses to out-do some one else, or, more abstractly, to distinguish one's self. Competition among groups is a principle that has wide application and large possibilities.

Acts learned are not new things taken on, then; they are not disinteresting matters unrelated to our welfare, but are modifications of ourselves and never leave us what we were before. The acts the soldier is to learn are modifications in his instinctive equipment to fit him to do given things, to distinguish himself in such and such lines of national service. The formalities of military life which confront the new recruit can be much more quickly learned and heartily incorporated if it is made clear to him what they mean.

For purely practical purposes in the consideration of this subject it will be advisable to distinguish two classes of learning: (1) the learning of practically new acts or of difficult combinations of acts only partly under control and (2) the modification to a slighter degree and the perfection of habits or movements already under voluntary control. For short we shall refer to these as Class I and Class II, respectively. Class I includes such things as learning originally to talk, to get voluntary control of one's various finer movements, to walk, to skate, to juggle balls (to keep two balls going in the air with one hand, catching and throwing one while the other is in the air), to trace some irregular figure by watching the hand movements in the mirror only, etc. The last two illustrations are somewhat artificial, but very useful for illustrative experiments on learning. Class II would include increasing one's rate, ease, and legibility of hand-

writing; learning a foreign language when one already has control of the speech organs; improving one's language, spelling, enunciation, bearing; learning to play musical instruments and to sing; learning telegraphy, typewriting, stenography; learning the various sciences, their methods of investigation, their terms, theories, etc.; making improvements in various daily activities, and so on. Clearly most of the things that recruits must learn are in Class II.

When a new act of Class I is being acquired the first thing to note is that some strongly impelling inner impulse is manifest, such as hunger, impulses to escape from confinement, impulses to more effective self expression, or to escape from excessive or painful stimulating conditions. When men began experimenting on the learning of animals the first problem was to supply a proper motive, different from that needed by an adult person, for the animal to attempt doing something. Such a motive was found in hunger, in escape from confinement or from punishment, or in letting the animal try to get to its fellows from which it had been separated. We lose sight of some of these motives under the artificial conditions of our human environment, but they must be there just the same and ought to be utilized as far as possible if we are to get the best effort. No learning takes place, even in man, without some sort of motivation to the effort. No person learns comparatively well and readily that about which he is somewhat indifferent, unless it is some insignificant act accidentally associated with instinctive responses. We see conditions so far ahead of us that often it is difficult to say just what is actuating us. In the case of animals the necessity of proper motivation to learning therefore comes out more clearly. Proper motivation to training acts of Class II is also necessary, though not so obvious to superficial observation.

The second fact to be noted about learning acts of Class I is that *a great number of apparently useless acts*

occur on the first trials; excessive, random movements take place in an orderless manner. These cannot be prevented even in an adult man. Try it in ball tossing or mirror tracing! The child in learning to walk makes numerous arm, leg and body movements that are afterwards unnecessary and are therefore later eliminated. In trying to skate for the first time one throws the arms and legs about to keep balanced, bringing into play almost every muscle of the body. Except for momentary periods these balancing movements take practically the entire attention. All other things lose their importance for the time and one becomes wholly involved in the new experience. The same thing is true of many other acts of Class I that could be selected as illustrations. These excess movements remind one very much of those seen in cases of extreme excitement, as in anger, fear, or joy, or even in worry. In both cases there seem to be overflows of nerve impulses into various pathways which later are discarded, just as we see water overflow its bounds and spread if something interferes with its free flow, or when it spreads over a new field for the first time.

The third important point about learning is the *gradual elimination of these useless or irrelevant movements*, just as the water soon wears for itself a definite channel and therefore ceases to spread. Continued trials in the learning of some new act and also in the improvement of acts (Class II) soon lead to a great reduction in the errors made and in the time taken for a certain performance. The person learning to skate gradually decreases the irregular arm and body movements, and becomes correspondingly freer to attend to surrounding objects and persons. It is hardly right to say, as is often done, that this comes about by repetition; for by mere repetition of such movements as appear useless and irrelevant he would never learn, but would continue to make all those ungainly movements and to fall down. Only certain acts are repeated, the most fit ones, that is, those

that are most fit for the purpose in view (or for the needs of the organism, or acts accidentally associated with such needs, when no conscious purpose is present).

Learning is therefore largely a process of *selecting* from many random acts those most fit for the purpose, or most successful for the attainment of the thing to be accomplished. Often, it must be noted, this selection is not done consciously, and the individual can give no satisfactory statement of the selection later or say how it was brought about. Even in lower animals learning goes on by precisely the same general means, or through these same stages. A rat put into a problem maze containing many 'blinds' and irregular windings will at first run into now one, now another, until the food he was previously allowed to taste is found. In subsequent trials these errors are rapidly eliminated. So also with the random clawings, bitings, and other movements of a cat getting out of a problem box closed, let us say, by a latch. Gradually the movements that raise the latch survive over all the others. This result could never be obtained by mere repetition of all the original random movements.

Finally, when the act is learned we get only the successful movements called out by the stimulus and these are performed quickly, uniformly, and with little or no thought of them, so that the individual can be free to attend to other things. At this stage the habit is formed, but additional practice will continue more and more to consolidate it and will make it more permanent and more difficult to interfere with by other acts or habits. The rapidity of habitual acts, their ease, uniformity in speed, and the diminution of effort expended, all make for economy. Many of our acts can well be reduced to the mechanical, semi-conscious type so that they will take care of themselves when we merely think of or are confronted by, the situation requiring them. This will leave us freer to make ready in thought for larger matters. A large number of our acts so seldom occur in certain par-

ticular combinations, however, that they can never be thus reduced to a clap-trap performance; they remain more or less conscious or deliberate. This is, of course, fortunate on the whole, for otherwise we should soon be reduced to mere unconscious automata—living machines—as some insects *may* be. It is important for the trainer to keep these general facts in mind, so that he can work to a purpose, intelligently organizing the soldier's life for the most rational and effective expression.

One should not hastily conclude that the random, unco-ordinated acts noticeable in the early stages of learning, or in doing a thing that is new to us, are useless and wholly to be prevented if possible. In an important sense they doubtless give an individual his bearings, his general orientation with respect to the appropriate response; they make him more adaptable. Neurally speaking they doubtless open up to a degree other channels so that in case the stereotyped act, which is the outcome of the training, fails to suffice under changing conditions, new acts appropriate to the circumstances may more easily become organized. For specific performance in some particular circumstances it may be profitable to stereotype acts by as great a short cut method as possible, preventing if it can be done the excess movements, but it is questionable whether a general use of this method would not greatly limit one's general efficiency and adaptability. It is perfectly obvious that one may go to extremes either way. The random acts seem to have a real function in keeping one alive to larger co-ordinations and to the various uses that may be made of the specific habits learned, and also in keeping one more physically fit and adaptable and mentally more resourceful.

Acts which are to be mechanically performed under the direction and control of larger voluntary activities should be reduced as quickly as possible to the automaticity of habits. This is best accomplished by a proper distribution of practices, say a short time daily for many

days, rather than by a too concentrated practice of long periods for but a few days. For example, twenty fifteen-minute periods coming about once daily are generally more effective in such cases, other things equal, than five hours in succession, than one hour daily for five days, or even than thirty minutes daily for ten days. The exact economy here depends to a large extent on the nature of the act practiced and on the condition of the individual, and cannot be definitely stated without investigation on the specific problem. Too long a period between each practice is also not the most favorable.

Full and complete attention to the drill, with a recognition of the part the mechanical act when learned is to play in the larger voluntary acts, is necessary for the greatest progress in it. Such intelligently directed effort for short, regular periods prevents the occurrence of the fatigue that would be inevitable under longer drills and it also keeps up the motive or the energy necessary for intense effort.

The successful director of learning and training processes does not allow himself and his men to become so involved in mere technical details of practice as to lose sight of the larger perspective and the real impelling motives to human conduct. He does not forget that normally learning, or changes in our instincts and habits, takes place only when our organic needs and desires are not properly met. In other words, so long as we have everything that we desire and need, in the broader sense of the terms, we put forth no effort to learn new acts. Experiments have shown that important as detailed matters relating to methods of procedure, to the distribution of practice, to fatigue effects, etc. are, the attitude of the learner may outweigh, positively or negatively, the effects of probably all these. *The learner must be motivated from within*; he must have an eagerness and an alertness, a will to learn, that make him throw himself actively into the work.

In fact, two of the things that are of prime importance in learning are, first, the setting up of definite, well understood and attainable standards to be reached, and accurate, objective means of showing *when* they are reached or *how far one falls short, and in what manner*, of attaining them; and, second, the *arousal of the proper ambition* or of adequate motives in the learner. It is simply surprising what a man can accomplish when these conditions are fulfilled, when the standards are not put too high all at once, but are definite and exacting, and results are accurately and objectively checked; and when with these conditions one is made to feel that the attainment of the ends or the making of a good record is vitally related to one's personal welfare and future in one or more of the ways that we have indicated or will point out later. The learner's interest is of fundamental importance. Under these conditions the instructor will find how much real men enjoy strenuous, well directed work and drill. When properly motivated men are not shirks, but they are aroused best when they see that there is real worth and test of manhood in what they do. Under these conditions they go at the details of drill and practice and enter into work with whole-hearted effort.

There are also other advantages of giving drill work proper perspective and motivation which cannot be explained here. Intelligent recognition of the rôle that any such automatic habit is to play will also prevent, possibly, conflict of impulses and of the motives to practice.

Of this latter point more should be said with specific reference to the training of men for duty in the army. Men who enter the army come rather suddenly into a new type of life; ideals are new, methods are new, and the tools, or instruments of warfare, are, in the main, new. But most of the acts to be learned be-

long to our Class II, described above; that is, the elements of the acts are already under voluntary control. The specific acts, however, must be so related to other acts and to ideas of the new situations that when called for or demanded by the necessities of the situation they take place quickly, with little effort, with a high degree of uniformity as to time and accuracy, and with but little direct attention. Many of the recruits, whether volunteers or drafted men, are highly intelligent; some have already acquired a considerable degree of efficiency along particular lines of social service or in certain other vocations, while others have no special training but have been general laborers. There are a few who are not very adaptable, who have, generally speaking, poor ability. These men differ also in the spirit they represent. Many of the drafted men, unfortunately, have not had the education and the associations to give them highly intelligent and co-operative views of their new duties; they are rather negative, or at least passive.

With this heterogeneity of material for training, the officer—non-commissioned as well as commissioned—has no small task. These men cannot all be trained by the same method without great waste, and, what is even more important, grave danger of almost disgusting the more intelligent men and, possibly, of arousing their opposition. The interest of the most apt student must not be lost in the care of the stupid one. The better men do not need the amount of repetition of instruction and drill required by the backward few. *Instruction must be individualized as far as possible.* This is inevitable, especially when men are taken as late in life as are the recruits and from so various stations and vocations. Each subordinate officer must have a large degree of freedom for the use of his own judgment and methods so that he can particularize in training wherever this is needed.

Some of the men are whole-heartedly in the work, and will get the general situation and the requirements in mind relatively easily and can therefore, with but little intelligent direction, train themselves on some of the more difficult technicalities. In such cases frequent, pertinent, short criticisms and further suggestions are of vital importance and require but little time from the officer in charge of the immediate unit (squad, platoon, company, etc.).

Other men must have a great deal of attention rather continuously from the first, or they will fall into bad habits to get away from which will require a great deal of time and effort later. In training students on ball tossing for a learning experiment, the writer found that some girls, who were very poor at the exercise when not carefully watched and aided at first, fell into certain confusing habits which later made progress practically impossible to them (*Jour. Exper. Psychol.*, 1917, 2, page 197). A start in the wrong direction is to be avoided as later changes in habits are possibly even more difficult to effect than to start from the beginning. The accuracy of these statements depends, of course, on the nature of the specific act to be acquired and on the adaptability of the learner. Often, moreover, a backward individual can gain most by the observation of others in practice *after* he has himself tried the exercise. *Showing how* is often much better than *telling how*, especially when there are a number of difficulties in the act.

The great principle underlying all this is *to distribute attention and effort where these are needed*. Great individual differences are found among men even when they are chosen from equal stations in life, and to train all alike is an inexcusable waste. It is a helpful practice for each officer to have some sort of list or record of all the essential things that the new recruits must learn to do under his own direction, and to keep this record constantly at hand for reference. Each man can be checked

off on such items as he can do passingly well, and can be assigned special drills by himself on those points on which he is weak. Then the more formal drills in which all take part will tend to weave together the various elements of the movements and acts, taken up by the selective method already explained. Thus by encouraging and requiring individual drills, and by giving individual attention to specially weak points, the leader will find that the general drills will come along much better.

The officer will by this means have a more detailed and adequate knowledge of each man, of his general view and the degree of his willingness to co-operate, and of the extent of his confidence in himself to get hold of the situation quickly; he can therefore encourage and stimulate individuals where this is necessary, even by the use of various rivalry and ambition motives, and can more effectively offer specific criticisms and show a detailed knowledge of the entire procedure and of each man. Such knowledge and individual attention cannot but inspire respect and in time enthusiasm in the men. No private, when such individual drill and criticism are attended to by the leader, can have anything like the knowledge of the other men and of their difficulties that the leader has, whereas a keen individual can easily rival the officer in this regard if all practice goes on in general and in group formation alone. Moreover, by such distributed and selective practice *the officer himself increases greatly his own opportunity of progressing*. He gets more and more insight into the real psychology of learning, and specific problems arise in his mind which can be worked out in special study and planning periods. These opportunities tend to keep him well in advance of his best men by the stimulus of the special problems he meets and they center his attention on the pertinent points of the learning and force him constantly to refer back to various chapters of this and other manuals and references for suggestions toward the solution of his problems. That is

to say, *he has real motives for his own progress and advancement*, far beyond those afforded by a non-selective method of training. He also saves days and even weeks in the training of each group of new recruits, because the whole group is not held back by the special difficulties of the individual men.

The benefits to the country in a crisis are tremendous. As a consequence of emphasis on special drills more attention can be given in the general drills to the larger relationships of the several acts and movements, to the actual work of fighting. Thus the acts can become more nearly automatically established and more firmly associated with the co-operative procedure among the different units of an entire division operating under imagined fighting conditions. The result will be that when the men get into real action against the enemy their timidity and fear, and other emotional disturbances, will be under better control by virtue of their being more at home with the weapons of war; there will therefore be greater confidence and less necessity for thought about the methods of procedure. Such greater freedom from the necessity of extreme attention to individual defects in the general drills will afford better opportunity for the leader to help the men imagine real conflicts, to picture to themselves surprise attacks, dispersing of the foe and the pursuance of them to complete victory. These various acts must be learned as far as possible in the relationships they are to have in a real struggle. Final training in them should of course be received in close contact with actual fighting, or training in the control of the emotions will be inadequate.

Responsibility of training in all the duties and functions of warfare, then, rests on every officer from the corporal up. Each officer should hold his next subordinate responsible, and in normal cases deal only with him, for all details of training and of preparation in his own unit. It is only by this means that a proper sense of real

manhood and of responsibility arises in each officer and private, and that a proper perspective results of the relation of each unit to the entire division, army, and nation. Co-operation and intense individual effort are the key-notes to success, and only by this means of individual responsibility reaching clear down to the private, respecting his own acts and duties, can the proper motive for co-operation and intense individual effort be attained.

III

The point of prime importance for the officer to bear in mind when training his men is that interest must be aroused. In the foregoing chapters various suggestions have been made as to how this is accomplished,—appeals as directly as possible to instincts and natural predispositions, the development of personal interest in the group and pride in its good name, and so on.

The rules, regulations and customs of military life which confront the new recruit can be much more quickly learned than otherwise and the newly initiated will go at his task of learning them with keener interest, if it is made clear to him what they mean. This is emphasized strongly by Major Geo. Bell, Jr., in the following illustration: "Great influence can be had over men if there be explained to them the logical reason for certain practices. The origin of the salute should be explained to them and such an explanation will go far to remove the idea there is anything menial or subserviant in rendering military courtesy. In the middle ages knights were clad in armour and the head covered with a helmet, the visor of which was kept closed. When one knight met another the only way in which one could recognize the other as a brother in arms was by raising the visor. The practice was soon established of the junior raising the visor first, whereupon the senior returned the salutation. The salute today is relatively the same practice. As a matter of fact, men in military or naval service are much more polite than civilians because no military or naval

man meets another man without greeting him as a brother in arms by means of the salute, the junior rendering the salute first." (*Op cit.*)

In general the instructor or officer will always do well to emphasize the significance of things to be learned. This gives perspective and interest to otherwise unrelated and dry facts; it enables the learner to group and to organize the things he is to retain so that his memory for them is far better than otherwise, and it develops a more active co-operative attitude, a "will to learn." This attitude is necessary for the best improvement as well as to replace passivity with snap and vigor in one's work. Moreover, mere details learned out of their practical relations are far less serviceable than facts learned in the true relationships they bear to our actions, that is, than facts learned in the relations in which they are to be used later. By thus emphasizing the significance and use of things, giving them perspective and meaning, one finds a more logical reason for drills; they are to train the person up on small points of technique which when imperfectly learned interfere with the larger practical activities. It is evident that in drills this necessity must never be lost sight of if interest and effort are to be at their best. Every little detail of drill and of training generally becomes by this means part of a vigorous, alert and interesting life to the soldier.

It is important to note also that extensive use of illustrations of various kinds adds to clearness and life, and makes misunderstandings less apt to occur than otherwise. In this matter, however, it is necessary to caution the young instructor against losing sight of the principle in the illustration so that the instruction degenerates into mere entertainment. Illustrations are in many respects very helpful, provided the principle illustrated is kept clearly in mind and is frequently pointed out.

Individual differences are never to be forgotten. The director who falls into a mere routine not only runs great

risks of losing the interest of his men but also of losing sight of real live problems of training. He is thus in danger of "wearing out" with the men and of being excelled by the most energetic of them. In many respects every person has his own peculiarities in learning, and if his difficulties are sufficient to warrant it he should receive individual attention by some of the means that have been suggested and by other means that the officer can develop for himself. As far as possible learning should be brought about by emphasizing in different ways the most successful of the learner's efforts and the unsuccessful trials will gradually be eliminated by neglect. Too much attention to errors rather than to the successful efforts is not only liable to put a damper on the enthusiasm but it also, in certain cases at least, tends to fix the wrong movements. The asking of questions on necessary matters by the soldiers and the stimulation of individual initiative is worth encouraging as far as possible under the conditions, and it is gratifying to note that this is being done to a large extent in the training camps.

It appears from our investigations that there is at present in the training camps a rather encouraging recognition of the value of individualizing training; officers seem to encourage the learner to ask questions about matters not clear to himself and to get assistance on special difficulties. These methods, with frequent tests and exact grading of results, assure the best progress, and they correct errors early before they become important obstacles; they also insure vigorous effort resulting from active attention and interest. A few quotations of statements by officers actively employed in the training of soldiers will serve as illustrations of the best practices regarding individualization in training and the recognition of individual initiative coupled with strict responsibility for results.

"When recruits are received, they are usually put in the charge of a competent instructor, a man who has dem-

onstrated his fitness not only by his knowledge, but by his patience and method of instruction. As the men become proficient in their duties, they are transferred to the company for drill purposes and for further instruction, and those men who show a slowness are either put under a separate drill master or given more instruction by the one who first had charge. It is desired as far as possible to take a squad forward and transfer it as a whole to the company, where it is absorbed by various men being scattered among the older ones.

“The captain is responsible for results in his organization, and it is desirable that the instruction of the various parts of the company by subordinate officers be along the lines laid down by the company commander. Where concerted action is not desired there can be no objection to giving officers or non-commissioned officers, who are given work to do, [the liberty] to use their own judgment and initiative. When I tell a sergeant to take a squad and clear a certain piece of ground, or to take his detachment to a certain place at a certain time, I do not give him minute detail as to how he shall accomplish it. I expect him to accomplish the purpose using his own initiative and judgment.”

“No two men can be treated alike. Take a squad of recruits, you can teach them the school of the squad, and the manual of arms in the squad as a whole, but each will have his minor faults, which will take individual instructions and many times worlds of patience. For one will insist on holding his gun in a certain position, or grasping the rifle in the wrong place, or stepping off on the right foot, or many other little things that he should not do, and it is mostly in drilling the recruits that an officer makes or breaks himself in the soldiers' viewpoint, for the first impression is always the strongest impression.

“The platoon is the smallest unit that an officer commands, and he is held responsible for every detail of that

platoon. Its drill, physical exercises, athletic contest, manual of arms, military bearing, soldiering and cleanliness."

"Give him full latitude and *require* results."

"Individual treatment is to be encouraged. Seemingly backward recruits often come to the front amazingly, if given a little extra attention."

"No doubt the matter varies greatly with different regiments. It is hard to answer this question [regarding freedom of initiative, etc.]. However, a company commander has a great deal of latitude in training his organization, and he is held strictly responsible for results. I have observed that with the great majority of officers, the more initiative they are given the better; with some, of course, liberty becomes license."

"A great help in instruction, especially of recruits, is mentally putting one's self in the other man's place. If he is having trouble with some movement or position, think what your difficulties were in mastering the same thing. Usually this will turn up some little points which will prove of material assistance. Some men don't try to learn and some method must be found of waking them up to a sense of their duty and possibilities. This can usually be done by an appeal to their spirit of competition. Make such a man feel that his 'bunkie' has no more ability than he but is making far faster progress. Have his corporal talk to him. It will often do more good than a talk from an officer."

"The methods of training in a company are largely left to the discretion of the company commander who is held responsible for the training of his men. He is seldom dictated to regarding this but is left to his own devices. If the company fails to develop properly, he is relieved and another officer is appointed who can get results. To my mind, this is proper. If a company fails to qualify at something or other, the reflection falls where

it belongs, on the company commander who is responsible.”

In modern warfare many forms of specialized training are necessary, which cannot be entered into here. Various kinds of special and intensive training are considered in Major F. R. McCoy's *Principles of Military Training* to which we have already referred, but the general principles here emphasized do not lose their importance even in such training. A rather humorous reference to the changes brought about by modern methods is found in the quotation by this writer from Major Kemp, as follows:

“I was once, only a few months ago, commander of a company of two hundred and fifty disciplined soldiers. I still nominally command that company, but they have developed into a heterogeneous mob of specialists. If I detail one of my subalterns to do a job of work, he reminds me that he is a bomb expert, or a professor of sandbagging, or director of the knuckle-duster section, or Lord High Thrower of Stinck Pots, and has no time to play about with such a common thing as a platoon. As for the men, they simply laugh in the sergeant major's face. They are ‘experts,’ if you please, and are struck off all fatigues and company duty. It was bad enough when Ayling pinched fourteen of my best men for his filthy machine guns; now, the company has degenerated into an academy of variety artists. The only occasion upon which I ever see them all together is pay day!” (Page 207).

CHAPTER VII

HABIT AND DISCIPLINE

I

General Sherman said: "Discipline is the soul of armies," and Lieut. Col. Lincoln Andrews, in his work on the *Fundamentals of Military Service* says: "Discipline is as vital to the success of an army as live steam to the operation of a locomotive." "Discipline," he adds, "may be defined as that psychic something which is always recognized by its manifestations of ever present respect for superiors, and instant cheerful obedience, not only to orders given, but to a high personal sense of duty."

There has been more written and said about discipline than about any other subject pertaining to military science. It is known by many names and has been defined in various ways, but there is one point on which all military men agree, and that is that discipline represents about seventy-five per cent of battle efficiency. Some military leaders contend that discipline is cold and mechanical, a condition to be found only in seasoned veterans, an automatic habit of obeying commands. Other leaders like General Sherman, have attributed spirit and life to discipline, saying that it is an actuating spirit that makes the soldier subordinate his own will and desires to those of the leader. As a matter of fact the ideal discipline, the discipline exhibited by some of the armies on the west European front, is a condition of the soldier that causes him to obey commands unconditionally and almost automatically as a result of habits secured by thorough training, *plus* a desire to obey, which has de-

veloped from within as a result of good fellowship, an intelligent understanding of teamplay and a spirit of loyalty to his country. The two essential elements are habit and spirit. This is the type of discipline that the officer should develop in his company.

It was some time before I came to a full realization of the extreme importance of habit formation in developing discipline. I had associated discipline to a certain extent with merely a willingness to follow the leader, to obey the commands of the officer. But from conversations I have had with British and French officers recently over from Europe, I found that under battle conditions when on the verge of making a charge, the will power of the soldier, especially in his first battle, is likely to desert him, but if his habits are thoroughly established he begins to act along the lines of least resistance. He feels a rifle in his hands; for months he has been trained to run forward and engage an opponent with his bayonet, and as it is the most natural thing to do, he responds to the call of habit.

The effect habit has on discipline is seen on the football field, the baseball diamond and the basketball floor. It takes months of intensive training to develop a well disciplined football team. When the ball is snapped back from center, the right half-back is off in the interference; and he does not stop to figure out what he should do, but smashes into the opposing end, blocking him effectively, because this is what he has been trained to do. Watch the baseball team practicing; the coach is knocking down grounders for the infield. First the third baseman stops a ball, swings his right arm and the ball is shooting down to first. Then the short stop picks up a low one and sends it over to first base. This seems wasted effort, but in a match game all this practice counts, inasmuch as the short stop and the third baseman must have the habit of throwing down to first. The spectator at the game marvels at the speed with which the

players manage to get the ball to first, in time to cut off the runner. It is merely the result of constant practice. Every world's series has brought forth brilliant and intricate plays which were executed mechanically in much shorter time than the players could possibly have thought them out.

If the great importance of habit formation can be impressed on our recruits in the army, I am sure it will result in increasing efficiency of the men. The American is so constituted that once you get him into an occupation he is not satisfied until he excels all others in that particular line, and if he realizes that by practicing on saluting ten minutes every day he will develop a fine snappy, military salute, you will find him exercising his right arm daily. So with his other necessary habits.

In regard to the other side of discipline, it should be kept in mind that the soldier's spirit depends partly on himself and partly on his environment and the circumstances surrounding him while in training. Some officers can develop the right kind of discipline and fighting spirit in any company of soldiers, and it is quite evident that the discipline of every company is greatly dependent on its officers. In the foregoing chapters we have considered ways and means of interesting the recruits in their work and ways of appealing to them. All these factors—competition, play, teamplay, and leadership—enter into the development of the ideal kind of discipline. We must not have the German type of discipline based on servility, fear, and blind allegiance, but by means of intelligent instruction we must develop an attitude in the soldier which will manifest itself in an intense desire to do his best and to co-operate with his fellows for the common cause.

II

In the previous chapter we have considered the method by which habits are formed. To learn is the same thing as to form habits. We have noted that when

the elements of an act are new, so that control is impossible, a great number of random and apparently irrelevant movements are brought out by the situation to which the individual is attempting to respond; that intelligent practice gradually selects and emphasizes to final predominance the successful movements, so that finally the stimulus calls out only these movements. In the case of such new acts a person does not profit much by seeing others do the act, or even by being told how to do it. Such a case would be learning to skate, or to write with the left hand by seeing one's movements only in the mirror, not directly. Try this! In such cases the only fruitful procedure is to keep trying in a general way to do the thing required and to repeat of all the acts brought about only those that are successful, that do what we want done. In such learning, about all that a trainer can do is to make as clear as possible to the learner what is to be done, to encourage continued efforts, and to help the learner take note of and try to reproduce those acts only that are most successful. The learner must find out for himself *how it feels* to perform the acts that bring success. In such cases it is better to reserve specific instructions until they will mean something more definitely to the learner. One cannot think in detail how an act is to be done that one cannot do. The new recruit has, fortunately, very few such new acts to learn.

Acts of what we called Class II have practically no new or uncontrolled elements. We know how each act feels in the doing but must get co-ordination of several such elements. These concern us more directly; they include most of the acts the soldier must learn. Learning to handle the instruments of war and to make all the movements taught in the drills, etc. are examples. Such acts and movements can be performed in a general way, slowly and imperfectly it is true, when the recruit is *told* how to perform them or *shown how* by seeing someone else go through the movements. Without a good deal of

practice, however, they are performed with considerable awkwardness, unsteadiness and variation; great effort is also required, bringing about fatigue in a short time. These conditions must all be improved. They indicate that the nerve impulses spread a good deal into channels which are unnecessary for the skilled performance of the acts desired. The result is a conflict between various irrelevant acts, and consequent waste of energy. This indicates, of course, that our division of acts into two classes is somewhat arbitrary and that the line cannot be closely drawn. One simply cannot perform acts of Class II the first time just as they should be done.

A good example to work on is this, which can be practiced at the reader's own leisure: Rotate the right hand *forward* and the left *backward* at the same time. Practice till the act is learned, and note how it is learned. These general points may be helpful: Start the right hand going alone and keep this up till it runs somewhat automatically. Now keep it going in this manner, letting it take care of itself, while you start out the left hand slowly. Keep your whole attention on the left hand. Stop whenever you get confused and get a right start again as you did the first time. As you progress the attention can be directed to one imperfection after another till the performance goes smoothly and automatically. It will be well to try this exercise carefully and to note the various stages of the learning, then by keeping it in mind the following discussion will have more significance.

On acts that can be done by seeing others do them—popularly termed imitation—much time can be saved, as has been said already, by *showing the new recruit how*. Attention should be centered now on one and now on another detail, not isolating each act too much, however, from its relations to others with which it is to be performed. But only the easiest acts and movements can profitably be taught by this means to groups. There are always some men who will be awkward and who will

need a great deal of extra attention, each according to his own needs. These men must not be allowed to take the valuable time of the whole group. Under the present condition of recruiting the national army the West Point method of sink or swim cannot be applied too drastically, though with certain applications it may bring out the right kind of qualities. Under the conditions of the draft individualization of instructions should play a large part and much time can thus be gained. Some men can advance much more rapidly than others, and wherever possible provisions made for such advancement will be beneficial, and much time and effort saved. One instructor can quickly determine which aspects of training each of the men immediately under his instruction require. He can then set each man at work vigorously, when opportunities for such individual work come, going about correcting each individual specifically on his weak points and helping him when necessary to get the correct movements and ideas. Where great difficulty is experienced, the arm or leg may be directed into the proper position and movement. In such put-through training movements, however, the gain is not great unless the attention of the learner is on the act and the moving member. He must find *how it feels* to do the act in the right manner. It is better for the instructor in cases of special difficulty merely to guide the movements actually initiated and willed by the learner than to make the movements for him by the application of outside force, for the correct sensations of the movement can best come only when the learner is himself producing the act in its general features. The instructor should interfere with the willed act only in those aspects needing such help, the aim being to leave off such guidance as soon as it can be dispensed with. *The learner must learn by his own effort*, but the instructor should be critical and careful not to let an act pass and become mechanically established until it is actually performed satisfactorily. Good criticism can thus

be done only individually on all the harder and more technical points giving special trouble in various ways to different persons. Group drill will take care of the required uniformities necessary for common action and co-operative movements, and must, of course, utilize the acts learned in special individual drills and give them their setting in the entire group operations.

The showing-how stage soon passes into the commanding-to-do stage. One soon learns to do the act merely on being told or directed to do it in connection with the larger setting in which it occurs. But even at this state it is too conscious and uncertain to be safely relied on. It must be done over and over in various relations, the attention being gradually directed away from the act itself to the circumstances requiring its performance, just as we all learned finally to walk or to skate by just thinking of the place that we desired to go to and only being vaguely conscious of the specific acts *en masse*. One who has learned to write has only to think of the thought that he wants recorded with a general awareness of where it is to be recorded, of the contact with the pen used, etc. The detailed acts are no longer attended to. The person who has learned to walk merely thinks of a desired object in another room, gets some fleetly images of the surroundings, the general direction, and so on, and the neuro-muscular mechanism takes care of the rest. This must be the outcome also of the soldier's training; his detailed acts must learn largely to take care of themselves properly, and the change is a gradual one from the more painstaking methods of setting them agoing from their first clumsy movements partly directed, it may be, by outside force, to the perfect automaticity of fully practiced acts. In the final stage the act is set off indirectly, that is to say, only by attention to the related circumstances demanding it.

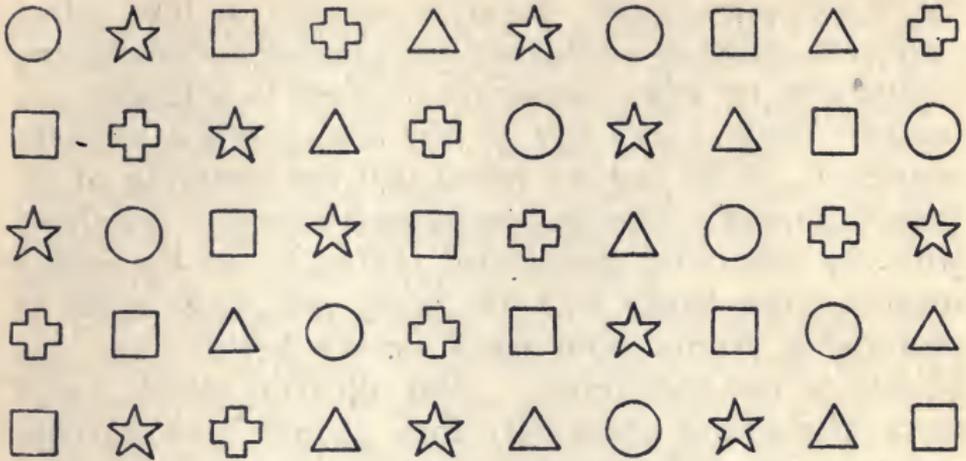
It should not be forgotten, moreover, that even when acts can be performed easily in this final stage, they read-

ily relapse into earlier imperfect stages, or into actual confusion, when one is thrown into unusual circumstances, excitement, or when important changes in attention are brought about. Try this on the arm rotation exercise suggested. Who has not noted that the centering of attention on one's steps on ascending a stairway interferes with the otherwise mechanical perfection of the movements? Any habits that are really important must be thoroughly ground into one's nerves before they can be left to run themselves. But all drills should avoid mere mechanical operation; they should have purpose and meaning, and attention should be directed gradually away from the detailed aspects of the acts to their larger significance, to the situation requiring them. Defense or attack activities, for example, are far more fruitful, so far as training for real service is concerned, if the men are led to imagine the enemy, in all its maneuvers, rather than if they go through the drills mechanically. The important point is that finally all the various movements of the drill must come to fit significantly into a functional system.

An interesting experiment will illustrate the fact that frequency of performance of an act in the general situation in which it is to be used is necessary for rapidity and ease in its operation. Time yourself on reading these words; go through them as rapidly as possible, speaking each aloud.

circle star square cross triangle star circle square tri-
 angle star cross square cross star triangle cross circle
 star triangle circle square circle star circle square star
 square cross triangle square circle square star cross
 square triangle circle cross square triangle cross star
 square circle triangle square star cross triangle star

Now do likewise with these forms calling them by their names as above.



When you have gone over both, repeat the experiment in the reverse order so that practice and fatigue elements will be balanced evenly between the names and the forms. We call this the "double fatigue order." Try the experiment on other persons. Average the results in seconds for each part of the experiment, that is, for the words and the forms separately.

It will be found that the forms take about twice as long as the words. Individuals differ very much in this exercise, because of the difference in amount of practice. The mental state also makes considerable difference, the forms losing more with confusion. Three adults tested in the evening when they were somewhat fatigued gave an average of 23 seconds for the words and of 65 seconds for the forms. Practice and vigor of mind reduce the difference; fatigue and excitement increase it.

Many other illustrations could be found to show strikingly as this experiment does, the fact that much practice on an act in the exact setting the performance is to have later is needed for speed and accuracy, especially under exciting circumstances. We all know well enough the names of the forms here used, but in the past we have not often spoken or thought the words when we saw the forms. In the case of the words it is different; we do

speaking or thinking the names when we see the words. In the latter case, then, we are more practiced in saying the words; the association is more direct, so the words come to us with greater ease and rapidity. The nerve impulses do not spread so much and bring about useless acts, conflicts, and waste of energy. Look for such useless conflicting acts while different persons are going through the exercises, and note the difference on the words and the forms. When thousands of people are operating together what a tremendous difference adequate practice, or well trained habits, will make against poorly trained acts! The difference would have to be estimated specifically for various kinds of acts to give any adequate conception. Our exercise will serve, however, to bring home the value of well trained habits.

Carelessness regarding the perfection of habits is often one of the main causes of failure, or of mediocre success. Speaking in absolute rather than in relative terms of superficial results, one may say that learning increases much more rapidly at first on any problem than it does later, with a constant degree of practice daily. To superficial observation there is enormous increase in successive early trials compared with that of later trials, especially when the rate of learning is judged by the change in the time required to do a thing or by the number of errors made. Stated generally, learning seems to go on very rapidly* at first on any new problem, then it gradually slows up toward a "physiological limit" at which point there is no further apparent gain. Often there occur before this point is reached plateaus in the learning curve during the continuance of which there

*That the view of rapid initial learning is based on a mathematical fallacy, as the writer has shown elsewhere, is unimportant here, as the learner and most teachers will be influenced by the superficial aspects of the changes they note and of the curves indicating the learning. See the writer's article, "Experiments in Ball-Tossing: The Significance of Learning Curves," *Jour. Exper. Psychol.*, 1917, 2 178-224.

seems to be no progress, plateaus which may tend to discouragement of effort. Again considerable progress will suddenly begin to show itself, often without adequate reasons, but especially on the application of intense effort directed to the phase of the learning that has ceased to show progress.

I have used the terms "to superficial observation," "learning *seems* to go on," "apparent," etc., in this general statement for there is really an important illusion underlying the whole matter. Plateaus probably mean that progress ceases only in the particular phase of the learning that we have been following, and physiological limits do not really mark the end of learning. Effects of practice beyond this limit of noticeable progress can be measured in indirect ways, for example, by testing memory or rate of performance some time later. Learning is a very complex process and we should not hastily conclude at any point that we can go no further. This is strikingly brought out in another way important to us in the present connection. The differences that the world rewards are really differences on the finer points of technique, differences unobservable to the superficial view. Only the expert can see the superiority of the very best surgeon over the one of fair ability, of the star football player over the ordinarily good player, of the renowned scientist over the good scientist, of the great commander over the one of fair ability clothed with equal authority. Somehow the small differences at the high points of efficiency in the learning process, or of habits acquired, *do* bring results, and these results seem to vary inversely with the superficial, or more apparent, differences in the habits as ordinarily judged.

It is the man with continuity, who stays at a thing and drives away day after day, week after week, even when others can see no further gains, that reaps the big reward. He finally towers out of the realm of mere mediocrity into that of expertness, where the rewards

are ample. The ordinary man gets satisfied too easily, and ceases to advance further. When the latter sees no further immediate progress he stops and says: "It doesn't pay to go on further." Often he changes to other things, stimulated by their newness, when the points of fine differences and slow apparent changes in what he is learning are reached, and so never becomes expert at anything. The world does not ask so much, "In what line are you working?" as, "How far beyond the point ordinarily marked *good* have you gone and will you go?" Surely in the complex and various work of the army of this great democracy it will pay the officer to work beyond limits of ordinary efficiency.

Discipline, as a condition in the men of the army, may be thought of as a result of habit in the largest sense, including adaptation. It involves not only ease and readiness and efficiency in the carrying out of orders, and in the performance of duties generally, but also endurance and *morale*. Teamplay depends on discipline. In a way, discipline is the general result sought by the various means of training and hardening of troops, though discipline itself is not an end; its own end is, of course, victory or protection of country. A well disciplined army is one that can do its work efficiently; that does not become seriously disorganized by fear and other emotional disturbances, or by such hardships and privation as soldiers are liable to experience; it is one that makes its marches and its attacks and defenses with as little confusion and waste of effort as possible. Well disciplined men respond instantaneously and whole-heartedly to the commands of the leader so that a commander can manipulate the entire army as, from his information of the entire situation, he finds necessary. Without discipline "the best of individual soldiers are but an armed mob, to be made a mockery by a trained foe." "It is the very essence of training, and springs from the intelligence and conscientious work of the leaders who must in-

spire it, or whose incompetence will render its attainment impossible. It is what makes long thorough training so necessary, what makes military men shudder at the thought of war without adequate preparation." (Lieut. Col. Lincoln Andrews, *Fundamentals of Military Science*, pp. 9 and 10.)

Apparently most civilians do not appreciate fully the need of thorough emphasis on training and discipline. It must be remembered that a large per cent of the new officers and the men in the army were recently civilians. The war can go on successfully only when it is backed solidly by the whole nation. Great mistakes are sometimes made at awful expense to life and *morale* by the sending of undisciplined men into action. It is well known in science that the scientific or research attitude cannot be taken on suddenly; that the scientific "method" of procedure cannot be formalized and given over to a person for ready use. There is really no one method to it; it is rather a characteristic way of looking at nature and of understanding and controlling its processes, an attitude that slowly grows upon the individual and requires acquaintance with apparatus. Likewise discipline in the army involves a general attitude of mind, habituation and actual hardening to the life of the soldier, and long thorough training in co-operative and properly subordinative action. Thorough discipline is a great conservator of life when real war is to be met.

Discipline is therefore not a mere matter of habit and of endurance. It includes the whole mental attitude, and can exist at its best only as a result of a kind of training that has spirit and purpose as distinct from mere mechanical drill. Comparable to the "will" of a person, which at its best is an organization and direction of all one's bodily and mental resources, discipline in the army embodies its intelligence and emotional tone so organized in habit and teamplay as to utilize every nerve, muscle, and the instruments of war in the most effective manner for

the attainment of the one end—victory. In autocratic countries discipline is characterized by harshness, and often by brutal treatment of the soldier; in modern democracies such methods are abandoned, though implicit obedience to the commander is no less insisted upon as a necessity for proper teamplay. But the view is that brutality is less effective (and of course humanly inexcusable) than methods incorporating the whole-souled activity and devotion of the individual soldier. The democratic method reduces, or entirely eliminates, the inner conflict and waste brought about by slight inner resistance and opposition. The intelligent soldier, who puts his own mind and individuality into his acts because he understands that it is necessary for the common good, is far more able, has greater endurance and courage, and is more trusty in emergencies allowing of less supervision and requiring individual judgment, than is the ignorant hireling or the soldier driven merely by external compulsion and threats. Armies of well organized democracies do not take advantage of their commanders in conditions of uncertainty, and they do not “go to pieces” and become disorganized into petty revolutions and counter revolutions to anything like the extent that these things occur in autocracies using compulsion methods. Yet real discipline and immediate obedience to commands is just as necessary in democracies, but the motives and the understanding of the necessity of subordination and co-operation are entirely different. This is so important a matter that we shall have to devote an entire chapter to the mental attitude known as loyalty. It is obvious, and should be impressed upon the soldiers, that when warfare settles down to a close match and a protracted struggle between nations, the democracy has an immense chance of outwearing the autocratic enemy; for in the former case each soldier fights for the common good, while in the latter it is usually some particular individual or group of individuals of a military or privileged class that fights for

existence at the expense of the proletariat. This latter fact is of course always disguised, but it is well known that moral considerations, freedom of the press, etc. are important weapons in the hands of democracies.

CHAPTER VIII

LOYALTY

I

Much has been said and written about loyalty or patriotism and most every one has a fairly clear idea as to what these terms mean. It is doubtful whether there is any one that is not loyal to some person or institution. Loyalty to country is undeveloped in the case of persons who are more or less transients and who do not therefore become permanently interested in any particular place. Other individuals who have lived their whole lives in certain localities may become very much attached to such places, though their interest in other parts of their own country may not be marked. Loyalty to country is often in an undeveloped or dormant condition, but can be aroused or awakened in every one of normal mentality under the proper stimulating conditions. Naturally the degree of loyalty capable of being aroused in different individuals varies somewhat just as individual reactions and ability in other matters vary; but the point we wish to make here is that loyalty is the result of the proper kind of environment or stimulation acting upon conditions that are innate in each of us and that it becomes incumbent on the officer training his men to arouse it in them.

There is a popular view that the majority of people do not possess the trait of loyalty, a view that does not take properly into consideration the fact that loyalty is a development just as the getting of an education or the love of one's neighbors is a development, dependent upon a number of conditions. In the majority of persons loyalty is not on the surface, so to speak, and is not expressed except when the country is facing some crisis. In

times of peace we often hear it said that patriotism of the kind that we read about is a lost virtue, that the citizens of the country are pursuing pleasure motives and economic ends and are not interested in the larger welfare of the nation and the instilling of its ideals into the minds of the youth. In a sense this is of course true; national unity comes only at its best when the citizens meet common danger and band together for mutual protection, and national ideals do not grow out of a hand-to-mouth individualism, but let the country's honor be challenged or its safety threatened by another powerful nation, or let the lives of its citizens be put in jeopardy by unjust encroachments on national rights, and one finds that multitudes of eager citizens come forth patriotically to express their indignation and to offer their services and lives if necessary.

Some of the citizens of foreign nations during the first years of the present war assumed that America was no longer characterized by the patriotism of our forefathers, the founders of the nation, but later events are showing that we are as capable now of devotion to democratic principles and as willing to fight for national ideals as were the heroes of the past. We are now seeing illustrated the principle that loyalty to a country is best aroused and expresses itself most strongly in times of national crisis.

The arousal of loyalty constitutes one of the best means of stimulating an individual to his greatest efforts. The head of a successful business house, realizing the importance of loyalty in his employes, leaves no stone unturned in his efforts to arouse it in his men. Henry Ford, Andrew Carnegie and the late James J. Hill have all shown the value of awakening loyalty among their employes, and their ability in doing so was a large contributing factor in bringing about their material success. In college athletics it is loyalty to his team and school that inspires the athlete to do his best on the cinder track and

the gridiron; for loyalty calls forth the best there is in a man and puts his heart as well as his mind into his work.

No officer should labor under the delusion that every man drafted into our national army arrives in camp imbued with loyalty to his country. It is true that many will so arrive, probably most of the men, but some will not, and in the latter class patriotism or loyalty must be developed. Another thing the officer should bear in mind is that with some men loyalty to country and to the more abstract ideals of democracy is not easily aroused; it is too intangible. For such persons it is necessary that the object of their devotion or their loyalty be represented in some human being, the leader. The successful officer will find that by treating these men considerately they will come to show a strong feeling of loyalty toward him, which by the proper attitude toward his work he in turn can transform into national patriotism and the larger devotion to the cause that he represents. It is necessary therefore, that the leader at least have the larger view of justice and loyalty and then he can make this ideal concrete in his own life for those soldiers whose minds demand something more tangible and immediate. It is not intended by this statement to imply that a large per cent of the American soldiers are not far sighted and intelligent enough to be genuinely devoted to their country and to the ideals of democracy.

II

Usually we make the mistake of thinking of men as if they were primarily rational beings. But, as we have already pointed out, action precedes intelligence; reason usually grows out of obstacles to activity. Under simple conditions one acts readily and easily on the basis of in-born tendencies and habits, but hesitations and inner conflicts arise when complexities increase and one is under the influence of several stimulating conditions. In such circumstances it is natural that certain factors will be somewhat neglected and that those will be taken

note of which are associated most closely with the satisfaction of life's needs. Most people think very little of the larger possibilities of the world open to them in later years of their lives if such possibilities are prepared for now, but settle down more or less unreflectively to the satisfaction of the more immediate needs and the fulfillment of present interests.

Under more primitive conditions man was in close contact with all kinds of work and recreation. His instincts were fashioned under relatively simple conditions affording first-hand contact with nature. Social life was far different then from what it is today. Groups were smaller and better acquaintance among the different members of the group was possible. All members of the same group more obviously co-operated for the common good, and the work of each more closely related to that of others. If the group was threatened by an enemy, the welfare of each member was clearly at stake. The danger was usually immediate, so much so that powerful instincts and emotions, as fear and anger, were rather directly aroused. Who would not fight whole-heartedly and to his utmost limit when an enemy is at hand threatening his very existence?

These conditions have changed very materially. We need not go into details. The modern civilized world is complex, bewilderingly complex. Even when people are in their homes in the cities they often are very ignorant of their immediate neighbors. The necessities of life are supplied from sources so various and so indirectly known that enthusiasm is balked and the instinctive mechanism is baffled. There are too many things to attend to; it is impossible that all the forms of work and recreation about us can be properly evaluated in their respective bearings on our individual welfares. We lose interest in them and accept more or less passively the results that come to us. A similar complexity and indirectness exists in warfare.

But no person is in fact confronted by all these complexities. As each grows up from childhood he naturally accepts his local conditions uncritically; he plays with children whom he meets and in such places as come naturally to hand. If his clothes and his home are poor he does not long and seek for better ones, because the better homes hardly come within his experiences. When he is hungry he eats what is presented to him, rejecting only the positively distasteful. When weary or sick he does not select his treatment or his conditions for rest and relaxation; he takes what is given and, adapting to these, makes the best of them. These circumstances if not positively intolerable seem natural to him. When he gets older he falls in love with some one of his acquaintances, some one that has happened to stimulate and develop his affections when their underlying instincts matured; and the next generation begins. The better classes have a wider acquaintance among those of their own station, but they also know very little of the world into which they are born, very little of other classes of people about them and of what they do and are interested in. So man is, after all, in the main a creature of his more immediate circumstances; he is but little affected by the more remote possibilities of his environment. Individuals and institutions that satisfy his more direct instinctive needs come gradually and rather unconsciously to dominate his actions. He unreflectively associates them with his ambitions and projects them in his ideals; for ideals grow out of the circumstances that affect us, not from those that have no relation to the satisfaction of our wants or to the expression of our instinctive tendencies.

In great nations involving specialized social conditions like our own it is natural that class interest should be strong, and that, in spite of our public school system, persons should be devoted to their local groups, their co-laborers and vocational associates and leaders. Com-

plexities tend to put a damper on or even to kill enthusiasm; nothing is simple, direct, and definite. Since the real motive to thought and action is the satisfaction of instinctive needs, men naturally become selectively interested in things about them; they are little affected by matters that do not have very obvious and immediate bearing on their welfare. They become involved in partisan movements and class interest and lose sight in the main of the larger problems that confront the nation and of the larger ideals of the race. These problems are gradually taken up by men who are more or less specialists in these directions, who get their own needs supplied by attending to these matters. It is a mistake to regard these partialities, these group biases and limitations of interest, which in cases of inter-group friction so easily develop into class hostilities, as the rational decisions of men. They are merely the results of organic adaptation to circumstances, of the association of instinctive impulses and feelings with the conditions that afford their expression and development. It is only of comparatively recent date that even educated people have come to regard them as the result of natural adaptations under limited opportunities, and not the results of deliberate choice. It is not recognized as a rule yet that when once these group attitudes have developed, it is futile to attempt to remove them by argument. Argument and compulsion are the more direct and ready means of meeting such conditions, but it is now getting to be known that such methods only consolidate group biases and embitter one class of people against another. A person may be given good reasons why he is wrong, only to be aroused to greater activity and determination to disprove the position of his opponent and to justify himself. Personality and self-assertion will not down so obviously and directly; such direct methods hurt personal pride. In opposition from groups of equal, if not superior authority men will sometimes band together and fight to the finish, just to main-

tain their own "rights." *Real* men, whose vision and sympathies circumstances have unfortunately limited, are more apt to stand by their guns than are weaklings even of better training; and a soldier cannot but admire such a stand, which is nothing but loyalty and patriotism without the larger knowledge, the sounder judgment and the impartial agencies of justice that direct and temper loyalty at its best. Misdirected loyalty is, of course, only barbarism.

Every person is therefore doubtless loyal and patriotic to something. Individuals differ in loyalty on the whole because their circumstances have shaped their feelings and their views differently. It is, of course, true that among all classes of people there are some mere opportunists, men and women who will sacrifice anything for narrow-ranged and individual expediency; there are others also—and they are to be pitied—who cannot be aroused to enthusiasm by any cause or by anything. But as a rule Americans will "stand by their colors," even though some of them may be color-blind, to keep to the figure, by the limitations of their experiences and opportunities.

The real and effective remedy to misplaced loyalty is not found in simply telling people to be loyal or in enforcing certain attitudes—though the compelling of respect and of compliance with the common program is at times necessary for the safety of the community or nation. The effective remedy for innocently misplaced loyalty lies mainly in the broadening of sympathies and in the identification of interests in a common cause such as the one into which we now are throwing ourselves. Fortunately when loyalty to the whole country is most needed there is also the best opportunity for its development in the mutual co-operation against common danger; and the officer in the army who trains the men and leads them against the enemy is the man who has the greatest opportunity for this broadening of sympathies and development of real national patriotism. To make the most

of his enviable opportunity thus to train America's recruits from all the walks of life and to shape their loyalties to a greater humanity, he must not only be *much of a man himself*, but he must understand something of human nature.

If all the citizens of a great nation are to agree on some expressions of genuine loyalty there must be developed a degree of idealism, of range of view. Men must be taught and inspired to see beyond their immediate needs to their greater opportunities if they are to stand together patriotically against severe hardship and sacrifice for the common good of all classes and for a better humanity. The lack of such vision is now showing itself in the wreck of Russia. But this idealism cannot be forced upon a people of individuality, as Germany cannot force her *Kultur* upon the democratic world. It must be an outgrowth of common action and of interests extended to include, and really to promise ultimate benefit to all minor groups and classes. The general attitude of the leader of the diverse individualities recruited into the army, his broad interests, his personal sympathies, and his great respect for his calling and enthusiasm in his work will do far more than direct instruction can accomplish. It is the attitude of sincerity and enlightenment that counts far more than words. The occupation of all the men in the great work of preparing for the defense of their country—their drills, their contests, games, etc.—gradually develop common sympathies and ideals; conceptions of right and wrong, of good and bad, become so extended as to allow of more whole-hearted response and enthusiasm. This attitude is necessary in the teamplay which in real action demands absolute surrender of one's energies to the direction of the chief commander who is in a position to know the situation of the army in its entirety. Such whole-souled devotion and surrender to the country's cause is possible only when the cause is regarded as just and in

harmony with one's best conceptions of truth. If it is not so regarded there are bound to be reservations and inner conflicts on the part of individuals, which will greatly impair their usefulness. Who could enter enthusiastically and unconditionally today into a move that he feels is not right and may collapse tomorrow? It is one's conception of the situation and one's faith in the ultimate outcome of a country's cause that makes loyalty possible. As the soundest morality is that which is based on the belief that it pays in the large to be moral, so the most unfailing loyalty must be founded on faith that one's country is in the right.

How is this faith best instilled into the mind of the soldier? Justice, right, and truth may be regarded psychologically as principles or formulas that offer the greatest practical consistency of action for all concerned. We cannot divide acts absolutely into good or bad. These are relative terms. Professor Perry, of Harvard, in an interesting little book on morality, has put it thus: ". . . the moral drama opens only when interest meets interest; when the path of one unit of life is crossed by that of another. Every interest is compelled to recognize other interests, on the one hand as parts of its environment, and on the other hand as partners in the general enterprise of life. Thus there is evolved the *moral ideal*, or principles of action, according to which *interest allies itself with interest in order to be free-handed and powerful against the common hereditary enemy, the heavy inertia and the incessant wear of the cosmos. Through morality a plurality of interests becomes an economy, or community of interests.*" (*The Moral Economy*, p. 13.) On the whole that is right which offers the fullest opportunity of life to all.

How do we come to a consciousness of these common interests? How can we get the soldier to realize

that we are all backing him in the great sacrifice that he is called to make? In democracies we are frank, in the first place, to acknowledge that no person is in himself infallible, free from bias, error, and incompleteness of view. As we have seen, our activities and interests in social life become organized about certain ends and organic needs. The environment is so complex that on every hand it becomes necessary to select consciously or unconsciously that which makes for the fulfillment of our individual purposes and ends. Selection, and therefore partiality, is a basic principle in organic adjustment, in life generally. The organism reacts selectively to food, for instance. In the larger and more general sense certain animals are born to be herbivorous, others to be carnivorous; more specifically each organism is able to use and thrive upon only certain kinds of food material. Interest and attention in other realms of behavior are further expressions of selectiveness; imagination and dreams often project certain inner needs and desires. Even reason itself, far from being the impartial faculty in the determination of truth or in the balancing of evidence that it often has credit of being, operates for the attainment of desired ends, and justifies them when attained. It is, unfortunately, blind enough as a rule to unwelcome and unpleasant facts and conclusions. Can anyone doubt that a frank recognition of these facts, of our various biases, makes for greater tolerance and more solid devotion to the cause of democracy?

Satisfaction of our organic needs and instinctive impulses becomes associated with certain kinds of activity and with certain classes or groups of individuals and of institutions, as we have already seen. Adaptation to these conditions and to their various local standards makes it constantly more difficult for the individual to find satisfaction and ease of orientation under changed conditions. Anything making for such changes is looked upon with misgivings or suspicion, or even opposed out-

right. Whatever alleged fact or wherever assertion or view-point favors one's own peculiar circumstances and bias is generally accepted uncritically; there is no motive generally for critical examination of such a proposition or assertion unless it is flatly contradictory to and irreconcilable with the bias.

We think most about those things that somehow tend to impede or to aid our life's activities; harmonious impulses and acts soon settle down to mechanical, often unconscious or semi-conscious, habits. These latter seem to be the eternally fit conditions, to question which would be absurd even to the reflective and normally honest man. Bias does not always—if indeed usually—imply intellectual dishonesty. It is altogether less conscious and reflective, and more innocent, than such an attitude of deception requires. Often it reflects rather only a *naïveté* altogether common with the genus *homo*. Bias grows upon the individual so naturally and so gradually that to a narrow experience anything that satisfies the organic and immediate social needs, is simply accepted as genuine. Rather, the individual *grows out of* the narrow bias of his hereditary conditions and his social environment only under the stress of inherently conflicting conditions. Ideas and theories about truth and error, justice and injustice, arise only out of conflict among the instinctive impulses and desires. Bias is simply an organization gradually forced and given shape by external conditions, often as unconsciously formed as an infant learns unwittingly to manipulate an unwise mother or nurse by its crying. The greater demands of the expanding interests simply *wake us up* later in our lives, if at all, to the numerous prejudices in which nature in the more limited environment nourished us.

If there were only one group of individuals of a homogeneous nature no rational justification would be necessary, and little progress would be made. Who thinks of finding moral justifications for our assumed right of eat-

ing cattle, of working the horse, or of robbing the bee? On these practices we are all one. But since different groups under different conditions of life vary in their practices and their standards, and since several individuals through commercial and other relations come to have membership in different groups, it is inevitable that rational justifications for actions should arise. The mere perception by one person of the standards and customs of other groups different from those of his own, is not sufficient motivation as a rule, as it is often held to be, for critical reaction to the foreign group practices. The person might only regard such customs with curiosity. But when various individuals through commercial relations have acquired membership in both groups *these individuals will be forced to choose for themselves* when conflict arises between their own groups. They cannot habitually and automatically follow both at points of divergence. Under such conditions, therefore, there is real motivation to rationalization of conduct, to the building of standards and ideals of a more comprehensive nature. Thus criticism of certain groups and justification of others inevitably arise; reasons for various practices and justifications of existing conditions are worked out as necessity demands. Inner conflicts, inter-group difficulties and maladjustments, lead to similar results. They usually arise from individual differences and specializations of function. Very fitting and convincing explanations of existing conditions are thus developed, fitting and satisfying because they justify things *as they are*. Thus the points of view and biases of groups become established around local needs and conditions. They are consolidated into national ideals and loyalty only through conflicts among themselves and particularly with other nations, the latter consolidating all groups more or less completely against the foreign foe.

But while the masses of men are not much given to the guidance of conduct by ideals, except those arising

from practical necessities, scientific agencies and more impartial institutions of various kinds are constantly coming to play an ever increasing rôle in the selection and the testing of standards. These larger impersonal agencies, themselves at first developing out of incidental conflict and necessity, are now getting gradually to assume the definite rôle of explicit agencies for fostering progress; the discovery of truth, as we have defined it, and the setting up of new standards is getting to be their conscious object. This far-reaching idealism, this large optimistic atmosphere and outlook, should be made to play as directly as possible on the man who must go into the war and offer his life for his country. If he is not lifted above the mere class interest with which he was probably too much concerned before the call of his country, he cannot be relieved of inner strains and reservations which are bound to interfere with the unconditioned surrendering of himself to the greater cause. To become the best soldier he must get the feeling of satisfaction in the great cause itself that the religious missionary has or that characterizes the person at play, as we have already seen.

The value of an appreciation of governmental and scientific agencies by all individuals taking part in great group, business, or national enterprise is obvious; their stabilizing and idealizing effect upon conduct, with its ever widening atmosphere, is one of our best guarantees—if we may talk in these days of guarantees—of the final reign of democracy and objectified justice. Just as the courts have come to serve as state agencies for the impartial handling of individual disputes and personal differences for the common good, so science and other large impersonal agencies are getting to play an ever increasingly constructive rôle in the determination of means, standards and ideals for the attainment of the greatest development of individual interests compatible with the common weal. The function of these impersonal agencies is not only that of making harmony among men's conflicting

impulses and group interests or biases ; it is far more positive and constructive than this. Progress and greater fullness of life become the conscious ideal, and enthusiasm and co-operative effort for the attainment of justice, in the more nearly abstract or impartial sense of the term, are the results to those who understand their relations to such activities.

Soldiers should constantly be kept aware of these relations to the larger unbiased agencies of the nation they serve. Many of the men that enter the army have not had opportunities of very close acquaintance with these governmental agencies. The most immediate contact they have with any such agency in the army is the court martial. The exigencies of army life are such as to make this agency of impartial evaluation at best but an imperfect representative of the class taken as a whole. The various agencies for the finding and evaluating of scientific truth, both public and private educational and scientific institutions, are among the most efficient. The soldier to be most satisfied must feel that he is fighting in a righteous and laudable cause ; that he is offering his life not for a mere temporary circumstance, bias or madness, but that his life is given if necessary for a great cause of permanent value to the nation and to humanity. Only such an assurance can give him the backing and determination that can call out his very greatest efforts, sacrifices and endurance. He must be made to know that the people of his democracy and the various impersonal agencies engaged in improving the life of man are solidly behind him ; his cause, then, becomes identified with that of great statesmen, scientists, educators, and specialists and workers in all lines supplying food, clothes, raw materials, munitions, protection from disease and pain and other disasters. He must see himself, to be a good fighter, as a part of the great move by his race for a bigger and better humanity. And his part is by no means a mean one : his life is on the altar ; he may not live to the

attainment of the great end for which he is fighting. He must learn to be proud of being a *soldier*, of being called by a great democratic nation, exercising impartial means of selection, to do his "bit." This just pride should show itself in a general bearing of courage and optimistic co-operation; it expresses itself in his erect, manly attitude, his salutes, etc. Mere formalities which otherwise may have a tendency to arouse opposition, or at least passivity and lack of enthusiasm, easily become in the hands of the good leader and army teacher effective means of stimulating the men to enthusiasm. They symbolize something and serve as constant reminders.

As the man who believes that morality "pays as it goes" is probably more effectively braced against evil than he who is moral because of some mere abstract and absolute conception of truth, so an understanding by all concerned of the means and ideals underlying a great war is necessary for the proper motivation and control of those taking part in it. Persistency of effort toward the attainment of great national and international ideals, and proper discipline and sense of duty to the common cause, are safely secured only on such an intelligent appreciation of affairs. All cannot, of course, have a thorough knowledge and appreciation of such matters, but the better the soldier understands them the better a soldier he will be. Managers and leaders of men, where such knowledge and appreciation is widely current, assume the aspect of fellow workers; they are respected and obeyed cheerfully as representatives of the common interests, rather than being feared and hated as arbitrary, self-seeking individuals of the type that must drive and force men against their own wills. The effective will is the whole man active, not a part of him.

Among officers the matter of promotion is probably a "touchy" point. Frequently promotion is based merely on priority. In the past in many nations this has been almost the rule. In the present war there is a tendency

in the democracies to urge the criterion of efficiency as the basis for promotions. This is, of course, from all points of view the proper thing, for efficiency is what must "win the war." Hence we are all interested in it, and no one, not even the inefficient officer of priority right, will dispute the right of the efficient man to step forward. Questioning such a right directly would only be tantamount to showing lack of patriotism, or to manifesting an unwillingness to co-operate for the common good. Hence objections to what is done in the way of promoting on this criterion will always take other forms than direct objections to the principle. Claims based in fact on priority will ostensibly take other forms, usually attacks on the alleged efficiency of rivals for promotion. This becomes a delicate question, and all concerned should constrain themselves not to be too impatient for frequent changes based on efficiency; for the judgment of efficiency is not an easy one to make when all things are considered; efficiency cannot everywhere be discovered with great speed. At the same time the public will not be likely to tolerate passively any gross violations of the efficiency rule, so far as matters come fairly to their attention. The army tests and other means will help select the efficient, but the great test of efficiency must always be in one's *actual service*. A person should not be too ready to put himself up impatiently for advancement, even in his own secret estimation, for this will tend to react negatively on his optimism and general co-operative tone; the dissatisfied, disgruntled officer or soldier works against his own interests and opportunities as well as against the efficiency of his country. The good soldier and officer, the trustworthy person, is the one above all that can wait, and that will wait cheerfully, for the promotion that he has really earned; a slight delay, especially under the circumstances indicated, does not make him impatient or grouchy, for he realizes that self-control has every advantage in the end, and he has faith in the

workings of democracy with all its present shortcomings. Something is wrong with the person who always finds the cause of his own misfortunes and failure of recognition in surrounding conditions and in other persons rather than in himself. One's fellows will not long fail to recognize and reward tangibly real efficiency coupled with cheerful patience and co-operation.

Loyalty is nothing short of intelligent, whole-hearted devotion to a common cause or a common interest, such as one's country. We are loyal to that into which we can throw ourselves without hesitancy or reservations. The late Professor Royce of Harvard, in a book entitled *The Philosophy of Loyalty*, defines loyalty as "the willing and practical and thoroughgoing devotion of a person to a cause," or to a moral embodying the common good. We cannot follow him when he takes this end into the realms of ultimate truth or of "the eternal"; but there is much in the value, as he indicates, of the personal attitude of loyalty, giving one a cause that unifies one's interests and impulses and that is in some senses self-sufficient and complete, as we have said is true of the attitude in play and in art.

Local patriotism that says, "My country, right or wrong!" will never end wars in the world. The cause of democracy against autocracy must not be confounded with such a view. Loyalty to the present great struggle of democratic peoples cannot be based on any temporary bias or present group interest; this war is a struggle of nations. It has already involved the scientific genius and the educational and research institutions and agencies of all the Allies. America is in it with all her resources,—her agencies of science and medicine, of justice and administration, of economic distribution and social welfare, all mobilized for the one end of "making the world safe for democracy." We are all in it with all the civilization that our race has evolved; we are bent on protecting this civilization and on passing it on, with the addition of our

own humble contributions, to our descendants. The soldier can feel that there are no sinister secrets to come out of this conflict, no concealed individual advantages over others to be gained by those who are clothed with the authority to manage it. The leading educational institutions are putting their entire resources at the disposal of the nation, research laboratories are doing their best to further the cause, judicial experts are favoring the submission of peace terms, when the time comes, to the various nationalities affected, and there is a general cry against secret treaties and the violation of contracts. The world has never before seen a similar situation.

Here are real grounds for loyalty that transcends mistaken local patriotism and temporary bias. Here is a situation that can call out all man's energies and finer sensibilities. In this great struggle the soldier is at his best. He is the center of interest. If he should be called upon to give his life for freedom and justice—the ideals of democracy—he can feel that never has man come to a better opportunity for this supreme sacrifice nor has the soldier ever had a more enthusiastic and just world to perpetuate his name and deed.

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