CHAPTER SIX

Trigger Control

TRIGGER Control is the top priority item in teaching expert shooting. There is nothing in this whole course that will reflect itself so much upon the expertness of the shooting, by your class, as will a thorough understanding of what Trigger Control is and the value of its constant use and practice.

Trigger Control is the manipulation of the trigger with such unqualified skill that you will not disturb, or impart any motion into, your rifle's front sight.

Too many recruits believe that the only way in which to fire a rifle is to grit the teeth, shut the eyes and jerk the trigger, letting the bullets fly where they may. This is a musketry crime. It can have no place in the minds of soldiers. There is only one way in which to release a rifle bolt properly and that is with a firm, controlled, slow, steady, deliberate and cumulative squeeze of the forefinger upon the trigger. All other methods are all wrong.

The soldier who lacks this kind of trigger control is hopelessly without the ability to steer bullets straight to the aiming point.

You have doubtless seen an unfortunate lad who hopefully jerked his trigger while the muzzle of his rifle vibrated. He was probably afraid of recoil and with muscular exertion gripped his rifle in the anticipation it would stay still. His only hope of registering a good shot—the kind all marksmen want—was to yank the trigger as the front sight went merrily dancing past the aiming mark.

The boy with this combination of problems needs your patient attention. He has not grasped the elements of the preceding principles of expert marksmanship and must be brought up-to-date with the rest of his class so that he is fully receptive to the fundamentals of Trigger Control. If, then, he learns what is wanted in the proper trigger squeeze, he will practice it diligently because he will feel that he is now on the right track.

The accepted considerations of the world's leading rifle shots have placed the importance of Trigger Control at almost twice the combined importance of all the other Basic Principles of shooting.

This may jar the pet theories of those who have accepted the older methods of teaching marksmanship BUT just as warfare has been modernized, so has been the business of using weapons. Just as the clumsy old tanks of 1914-18 have given away to the modern, fire-spitting behemoths of battle, so has old musketry style been superseded by up-to-date procedures.

The ace marksmen have determined that in the scale of relative importance Aiming only embraces five percent. Position, Holding and Breathing each

demand but ten percent, or twice as much consideration, each, as Aiming. Hence, four of the five Basic Principles have only taken up 35 percent of the importance scale.

The balance of 65 percent has been given to Trigger Control. This is 13 times the amount awarded to Aiming and six and one-half times as much as to each of the other Basic Principles. Why is this?

No matter how expert one may be in the preliminary phases of good marksmanship, all this effort can be easily lost if faulty operation of the trigger causes aiming precision to be disturbed even the slightest.

The world's crack shots can be graded by means of their Trigger Control. The difference between poor and fair; fair and good; good and excellent; excellent and expert can all be judged by the skill which one class has over the others in keeping the rifle steady during Trigger Control.

No matter how well a recruit may be in position, may hold his rifle, may breathe properly, may aim with precision, he will not be able to shoot accurately every time unless and until he masters the steady, correct, deliberate squeeze of the trigger so that no motion registers upon the front sight as the bullet is sent speeding on its way.

How, then, can Trigger Control be mastered? The answer is: A thorough understanding of what trigger squeeze means and then practice, PRACTICE, *and more PRACTICE*

You don't learn to play the piano with five easy lessons. You learn it through constant practice. You wouldn't expect to take a mail order course in drafting and after reading the books set out to be a top-notcher in the field without practice.

When you left civilian life and entered the Army the squad drills were confusing and so, maybe, were some of the commands, too. But drill, which is practice by another name, gave you perfection.

If the world's champion riflemen, pistol shots and trap shooters regard practice as a daily requisite, the Canadian soldier must consider it is the solution to his eventual expertness on the battlefield. It is demanded and the recruit who does not practice it, is selling his life cheaply to the enemy through sheer, unadulterated carelessness and apathy.

But practice is never effective if it is boring. A recruit can only take so much of it. He can get mighty tired if it is imposed upon him for long periods. He will respond to two or three, five-minute practices of trigger squeeze a day but anything longer than that length, per period, will become tiresome to him and will implant a fast-growing germ of thought that trigger control is too monotonous and hard to learn.

The old adage "Practice Makes Perfect" never had a better application than in Trigger Control.

"HE KNEW HIS TRIGGER SQUEEZE!"

THE SQUEEZE

THE instructor must be patient with his class when teaching Trigger Control. It is not to be picked up by a recruit without much painstaking effort and practice. You can probably get across to him the general idea of what the trigger squeeze really is but you will be an extreme optimist if you believe that with just one or two demonstrations the recruit will be able to perfect it.

You cannot speed merrily past each phase of this basic principle of good shooting. You must take plenty of time and allow for much practice of each step as it is taught.

The erroneous impression which is entertained by many recruits that the trigger must be jerked, is an out-cropping of the silent movies, or the pupil's cap pistol days. When he takes his rifle into his hands he steels himself for an ordeal which he fears as much as an anti-typhus injection.

Again, the squeeze must be gentle, steady, cumulative and a building-up of pressure by the forefinger upon the trigger.

When you are giving your molars their morning maul and are squeezing the dentifrice out of its tube, you squeeze it and control it between your thumb and forefinger. You are gentle about it so that just the right amount for your needs will curl out onto your toothbrush. If you gripped it and gave an uncontrolled squeeze, big gobs of the stuff would squirt out to spatter you and your surroundings.

When you were a youngster you used to take a ripe cherry and gently squeeze it so that the pit would suddenly spurt out. You did not just know when that cherry stone would part company with the flesh. So it is when squeezing a trigger. You gently build up pressure not knowing when the striker will be released.

But the finger, by itself, cannot be expected to be steady unless it has a counter-pressure. The forefinger is one lever against another (the trigger) but in order to function properly it must work in counter direction to something else. Thus the thumb serves the latter purpose well, just as in squeezing toothpaste tubes and cherries.

How do the forefinger and thumb work together to produce the gentle squeeze that imparts no motion to the front sight before the bullet is fired?

Supposing you could affix a clamp so that one jaw was upon your forefinger as it rested in proper position upon the trigger and the upper jaw was on the thumb as it clasped the small of the butt. See the illustration, opposite. Should the thumb screw of the clamp be tightened slowly and with steady, continuous motion, the two jaws would move toward each other with equal, steadily-increasing pressure bringing with them the forefinger, trigger and thumb.

As this was done you would not know at what precise moment the clamp would be tightened to the point where the trigger was back far enough to release the bolt. It is that kind of steady pressure which is demanded of expert control.

The soldier who is trying to win the favour of his pet blonde doesn't slip his arm around her waist and give her a rib-cracking hug. She may like a "he man" but there are some limitations. He is, instead, gentle with her

and as his ardor is kindled he slowly increases the pressure until she asks whether they will have a military wedding or does he mind if she can't cook.

Taking up the slack of the trigger is an important factor in shooting. It is the safety or "get set" play which is as vital to rifle operation as the slack in your automobile's clutch or brake. If there wasn't slack in your clutch you would not be able to shift the gears of your car with the smoothness which you have mastered. If there was no slack in the brake pedal, a mere touch would give you no warning and you would be banged up against the windshield.

The slack is the means by which you prepare for the actual firing. It is the safety allowance. There isn't much slack to be taken up but there is just enough that if you were to continue to draw the trigger back, the firing pin would be released and the rifle would fire. When the race starter shouts to sprinters "On your mark! Get Set! GO!" the "get set" is the taking up of slack muscles. The trigger slack should always be taken up at the same time as the pre-firing sigh is given. It must be practiced diligently so that it is fully understood and mastered.

After the instructor has explained to his class the kind of squeeze that is demanded, he should have his recruit assume a prone firing position (which by now should be perfect) and close his eyes. Then the recruit should take up the slack as he gives his sigh. The closed eyes will permit the recruit to concentrate upon the squeeze without distraction and enable him to understand the type of squeeze that is wanted.

A false notion of rifle shooting is that a marksman must anticipate the precise moment that the bullet is discharged from the rifle. This is unnecessary and very wrong. If you try to break a glass rod by slowly increasing pressure of your fingers, you cannot judge the exact moment in which it will snap in two.

The belief that you must determine the instant when the bullet will be discharged is born out of faulty position, holding, breathing and aiming. The recruit whose front sight is cutting fancy capers endeavors to figure out when the front sight will be going past the aiming point. Thus he tries to calculate his fire for that precise moment. The recruit who does this is an almost hopeless failure and will require a great deal of attention from the instructor. Note the three steps of squeezing a trigger and the action of the mechanism, in Figures 1, 2 and 3, opposite.

But let us analyze the way in which the expert marksman performs. His position, holding, breathing and aiming are ideal. He knows that he doesn't have to estimate just when the bullet will be discharged. He is concerned with steadying the rifle so that it is dead upon the aiming point as he builds up the squeezing pressure on the trigger. He is aware of the fact that if he concentrates upon his front sight, the bullet will land upon the aiming mark if he doesn't jar the rifle in releasing the firing pin.

He is determined that he is going to hit the aiming point and if he doesn't get the steadiness he desires, starts over again with a fresh sigh. When his rifle stays dead upon the aiming point and the pressure is slowly building up he knows that the rifle will do the rest.

Figure 1 shows the trigger mechanism when cocked. Figure 2 shows it after the slack has been taken up and in Figure 3 the bolt has been released.

FIG. 1

FIG. 2

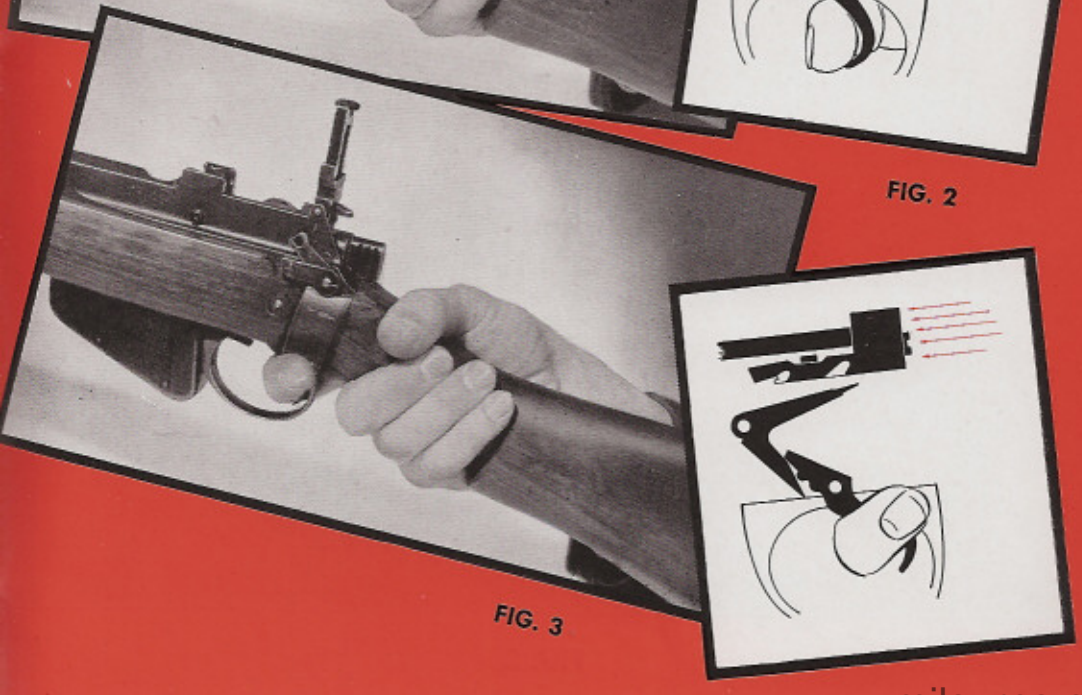


FIG. 3

FIG. 1

FIG. 2

There is not too much space with which to play, between each phase, so that the few seconds that are involved in perfect trigger squeeze bring scoring dividends.

The squeeze of the trigger is so important that the coach must demonstrate and check—check and demonstrate and then insist upon practice so that there will never be a question that the lesson has not been well and truly learned.

While the pupil is in the firing position with his eyes closed, the coach should place his hand over the shooting hand of the pupil with his forefinger upon the trigger finger of the recruit (see Figure 1, opposite). The slack should then be taken up and the instructor should then apply the correct squeezing pressure upon the thumb and forefinger. This MUST be painstakingly done a minimum of five times until the recruit knows the kind of action you want.

If there are other members of the class they should observe the pressure marks upon the top of the recruit's thumb and the top of the trigger finger as the coach's hand is removed. These will be marked by white spots with forced-out blood rushing back into the cells under the skin.

The recruit should now practice so that as the rifle is steadied by the sigh, the thumb and forefinger are contracted toward each other slowly, steadily and with determination. This effort must not be erratic nor jerky and without any stuttering pressure which would impart unwanted tremble to the rifle's front sight. The increase of pressure must be as smooth and as steady as the well-oiled, finely-threaded thumbscrew of a clamp that is slowly and continuously tightened.

Now you should let your class practice in pairs. They will fight it out among themselves and you can go from pair to pair, carefully checking their drill.

CHECKING RECRUITS' TRIGGER CONTROL

THE coach cannot exercise too much care in making certain that every pupil he teaches understands and practices Trigger Control. The reliable method of gaining assurance that the recruit does know what is meant by the proper squeeze is in the instructor taking the prone firing position and having the recruit apply the squeeze.

This is actually a reversal of the demonstration (Figure 2) in which the recruit was in the firing position.

Have the recruit place his hand over yours and then apply the proper trigger squeeze (see Figure 2, opposite). When he can do it correctly five consecutive times, he is on the road toward learning Trigger Control.

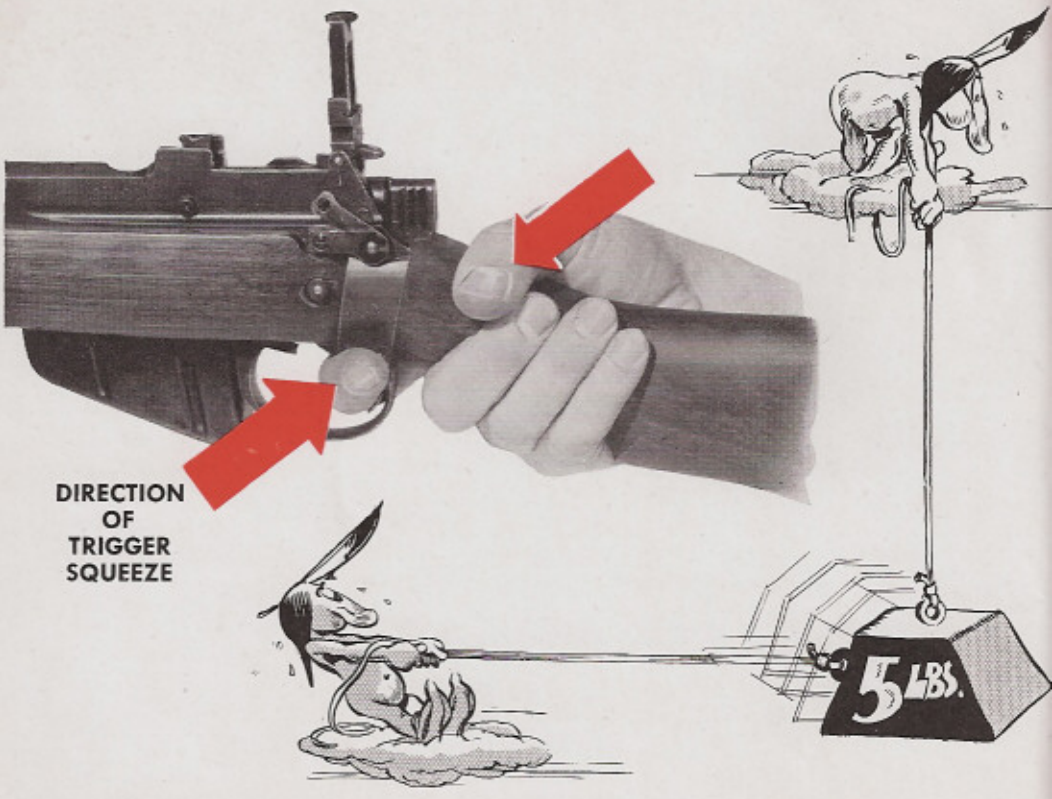
"SQUEEZING? HECK HONEY, I'M ONLY TAKING UP THE SLACK!"

DIRECTION OF TRIGGER MOVEMENT

THE trigger must be drawn backward and upward at an angle of 45 degrees. It is the natural way for the trigger to move because of the manner in which the hand has gripped the small of the butt with the forefinger around the trigger.

If a heavy weight were to be lifted vertically and also drawn backward by equal pressure, the weight would move upward and backward together, at an angle of 45 degrees to the ground level. The same angle prevails in the drawing, in a combined upward and backward movement, of the trigger.

The recruit should practice this movement at least ten times, at this juncture in the course.



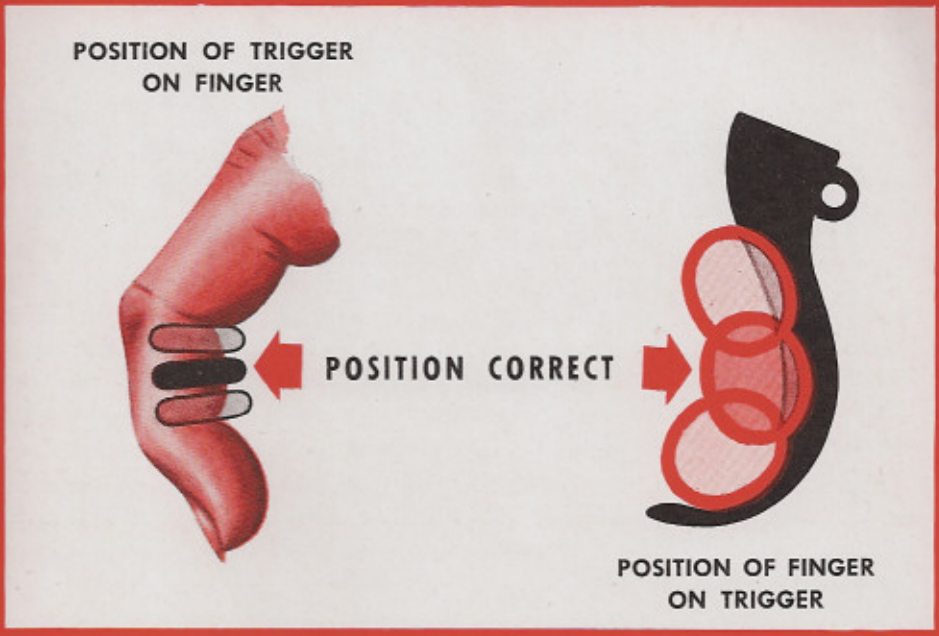


FIG. 1 FIG. 2

FINGER ON TRIGGER

AS THE index finger must pass at right angles over the curved trigger, the position of the finger must be such that the marksman will get the maximum of pressure and control with it.

The tip of the forefinger has little muscular control and is unsteady. Similarly the section of the finger closest to the body of the hand is limited in its movement so it cannot be used because of lack of flexibility.

The logical position would be halfway between the tip of the finger and the hand or upon the middle section or link. It is not meant that the recruit should deliberately try to put the finger in the creases between the first and second sections, or the crease between the second and third sections. Rather, the trigger should naturally come to rest somewhere upon the second or middle section. There it will perform best (see Figure 1, above).

Similarly the finger should be midway between the top of the trigger and the tip. If it were at the top of the trigger there would be insufficient leverage, while if it rested at the tip it would have uncontrollable leverage. Thus the midway position is best. Note Figure 2, showing the finger in the curve that has been provided for it.

In other words, the trigger and the finger should be perfectly crossed.

APPLICATION OF TRIGGER CONTROL

WHEN the principles of Trigger Control have been taught and practiced in small doses at frequent intervals, the instructor should encourage his class to determine the degree of control by the fact that during the squeeze, the less movement there is apparent in the front sight, the closer the recruits are to having perfect trigger control.

This calls for careful treatment by the instructor because he must get his men to focus their Master Eyes upon the front sights. The instructor should know that frequent practice of this focus upon the front sight while the trigger is being squeezed lays the foundation for "Calling Your Shots". It makes the recruit keep his aiming eye open not only while aiming but also when the rifle is being discharged. It defeats flinching.

Practice of this exercise should be done at least ten times and you can explain merely that the purpose of the drill is in being able to discharge the rifle so that no movement is imparted into the front sight. Good shooting demands this kind of control.

It seems to be a habit of front sights to want to wander. They can be placed directly under the auxiliary aiming mark, yet just when you would like to squeeze the trigger a little more, they shift off to one side or to the other. This is invariably caused by improper, jerky, stuttering, unsteady trigger squeeze. Note Figure 1, opposite, which shows a wandering front sight while Figure 2 is the result of such wandering when registered upon the target.

The good shot who encounters this bit of difficulty will know from experience that if his position and automatic alignment are both correct and if his elevation is correct due to the application of major and minor adjustments, the sight which wandered off the aiming mark will, if given time, wander right back to where it naturally should come to rest.

The expert who has taken up the trigger slack and is slowly and steadily applying the trigger squeeze does not relax his finger and start over again. He knows that if he did this on the battlefield he would waste much time—time that might provide the difference to him between life and death.

Thus the expert, not knowing the precise moment at which the rifle is to be discharged, pauses. He doesn't increase the pressure and he doesn't relax it. He just exerts complete control of his finger so that he can wait for the sight to wander right back to where it naturally should come to rest. Then he commences to increase the clamp-like pressure on the trigger, steadily again. In other words he only builds up the finger pressure upon the trigger when the front sight is at rest and points exactly to the spot he wants his bullet to hit.

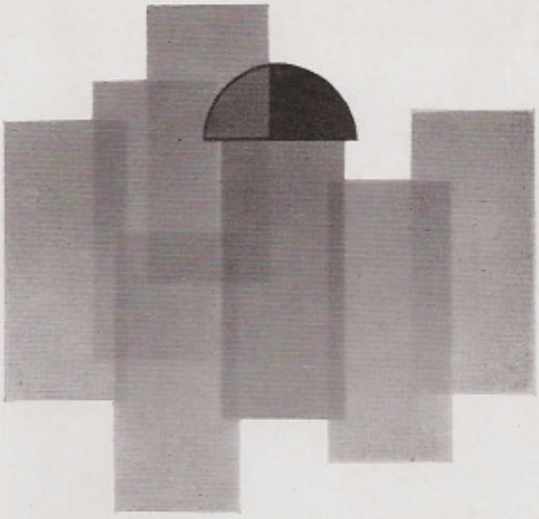


FIG. 1

WANDERING FRONT SIGHT

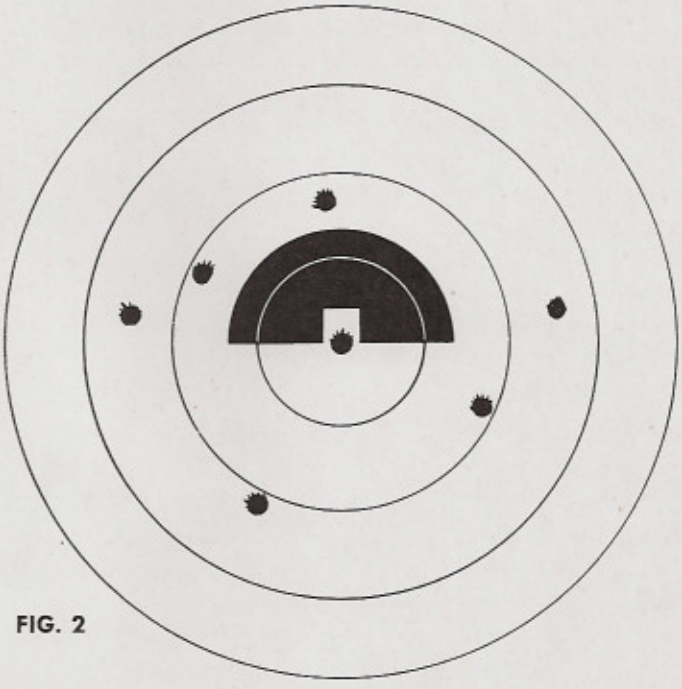
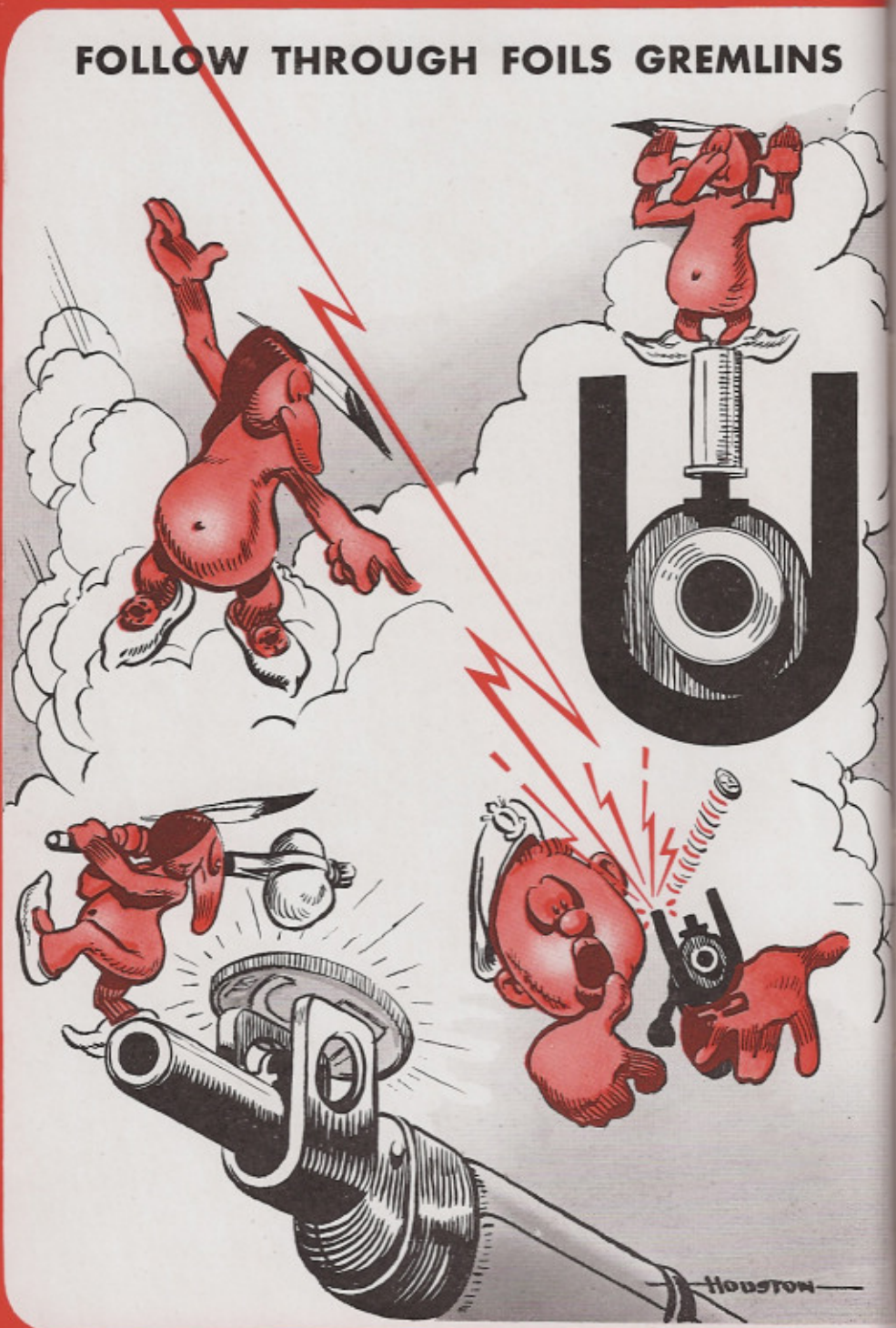


FIG. 2

ITS RESULT

FOLLOW THROUGH FOILS GREMLINS



FOLLOW THROUGH

THE baseball player whamming out a home run whips the bat around and after it collides with the ball it continues its swing. This is known as "Follow Through" and helps to steer the ball directly over the left field fence. The golfer, the bowler, the hockey player, the curler and the tennis star all practice Follow Through because it is the steadying, steering influence.

So there is Follow Through in shooting, too. It consists of keeping the front sight upon the aiming mark during the trigger squeeze and after the firing pin has been released. The tendency of many recruits is to let all their effort to achieve perfect aim be relaxed. They seem to say to themselves, "Well, I got that one away, so why worry?"

The marksman does not know the precise moment that his trigger squeeze is going to cause the firing pin to be released. So he cannot judge the precise moment when he should relax. Then, too, it takes but a fraction of a second for that firing pin to whip up to the cartridge, ignite the priming charge and start the bullet on its way. It takes another fraction of a second for the priming charge to ignite the cordite and still another fraction of a second for the bullet to leave from a standing start and yet another fraction of a second for it to move from its chamber up the length of the muzzle.

Therefore, it is cold logic that if the rifle must have perfect control before the firing pin is released then there should be the same, co-ordinated control during the accumulated fractions of a second when the mechanics of the rifle and bullet do their part.

Hence the Follow Through provides that steadying influence which good shooting demands. It is the maintenance of the rifle upon the aiming mark prior to the rifle's discharge and continuing through and after the mechanics of the discharge.

Experts constantly practice their follow through.

CHECKING FOLLOW THROUGH

AN EXCELLENT exercise has been developed for checking Follow Through and it has been found that two-man teams are best when it is used. It pays big dividends. Instructors should study the illustration at Figure 1, before proceeding.

Have one man of the team get into the firing position. Then offer the second man of the team a thin sheet of foolscap-sized paper on which pencil lines have been vertically and horizontally drawn through the centre of the sheet to form a cross. See Figure 2, opposite.

At the top the word "Up" is marked, at the bottom is marked "Down" and at the right and left sides "Right" and "Left" are shown respectively from the firer's point of view. It would be well for the feet of the firer to point toward the light, as the movement of the silhouette or shadow of the muzzle upon the paper will be used for checking.

Before going any further with the exercise, this is an ideal place for a brief lecture on Safety First. Have the second man of each team insist upon seeing to his complete satisfaction that the rifle is not loaded. He is going to be sitting or lying right opposite the business end of that muzzle and he is entitled to know that there is NO AMMUNITION in the rifle. The firer should check and so should his helper. This will be a perfect opportunity for them to realize the importance of careful measures in avoiding accidents.

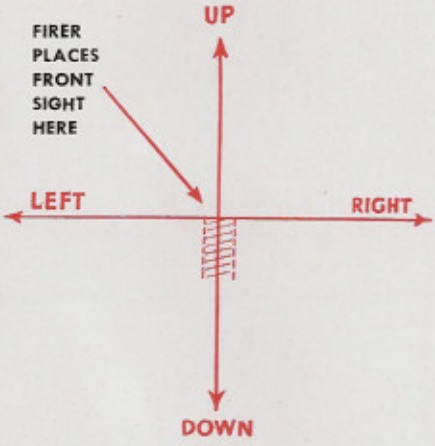
With the helper directly in front of the muzzle, he holds the paper so that the tip of the foresight is directly lined up with the centre of the crossed lines, which serve as a guide for the firer in detecting any movement of the front sight upon the release of the firing pin of the unloaded rifle. See Figure 3.

The muzzle of the rifle will now appear to the helper as a round disc, on the reverse, and unmarked side of the paper. As the pre-firing sigh is taken, the muzzle's silhouette will be shown moving upon the paper. See Figure 4.

The firer now takes his careful aim and his steadying breath and as he commences the slow, steady squeeze the firing pin will be suddenly released. If there is any visible movement it will be quickly apparent to the helper but it should also have been seen by the firer.

The helper must NOT call the shots. The firer MUST call his own and the helper should either confirm or reject the call. The firer should practice this until he can call nine out of ten consecutive shots correctly. The team should then reverse positions and repeat so that all the class will get the benefit of the exercise. If the instructor wishes he may select a recruit and give a demonstration of this test of Follow Through before assigning the exercise to the class.

FIG. 1



SHOT Nº	CENTRE	L	R	D	U
1			✓		
2		✓			
3		✓			
4	✓				
5					✓
6				✓	
7		✓			
8					✓
9			✓		
10		✓			
SCORE	1	4	2	1	2

FIG. 2

FIG. 3
FIRER'S VIEW

FIG. 4
COACHES' VIEW

CALLING THE SHOTS

CALLING the shots as indicated in the Method of Checking Follow Through is the standard by which you indicate your expertness. It is the proof by which the recruit can attain the "professional" touch to his shooting.

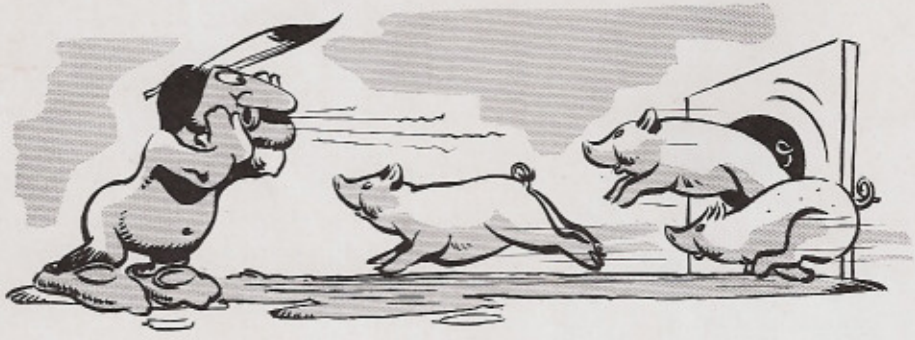
If you fire a shot and don't know what happened then how can you correct any mistakes you may have made? Supposing you aim at the auxiliary aiming mark of a target and plant your bullet at 10 o'clock, how will you ever be able to correct your error if you don't know what you did wrong?

The expert marksman always knows where his bullets are going to land because he knows whether the foresight of his rifle moved or not. If it didn't move, then the bullet will be right on the aiming point. If it moved, he will be able to correct his faulty trigger control for the next shot. He is able to do this because he has focussed his whole attention upon the front sight and has kept it there all during the firing process.

If you cannot call your shots correctly it means you did not know where the sights were pointing when the rifle was fired. In other words you closed your eyes and fired afterwards.

The illustrations opposite show what happens when you squeeze and call your shots correctly.

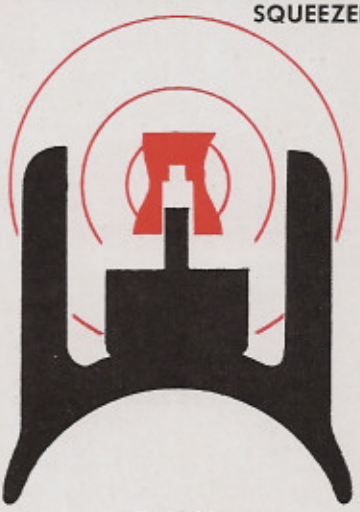
Squeezing the trigger correctly and the ability to call your shots properly are two extremely important rules of good shooting.



FLINCHED

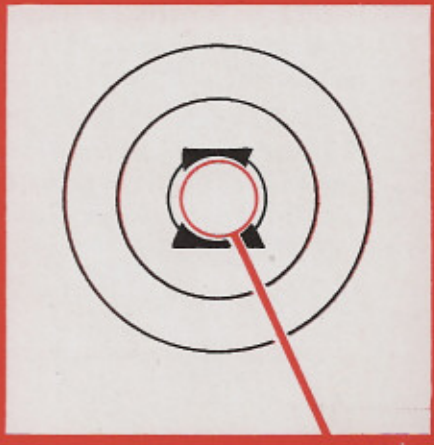
SQUEEZED

GUESSED



CALLED

MISSED



BULL'S EYE

TRIGGER SOLITAIRE

ONE of the best practice methods is called Trigger Solitaire. This little game calls for the honesty of the pupils just as playing solitaire with cards demands no cheating. It can be played in off-duty hours with the butt of the rifle resting upon the lap and the muzzle pointing upwards. Note the illustration of Trigger Solitaire, opposite.

The squeezing of the trigger *after the slack has been taken up* constitutes the game. By watching the tip of the finger to see any movement of it during the build-up of pressure you can determine whether you have scored or not.

If you cannot see any movement of the finger tip between the slack and the release of the striker, you have won a goal. If you do see movement you have lost a goal.

A game consists of five squeezes and at first you should get at least three out of five. With practice this should come up to perfect scoring every time.

CHECKING FRONT SIGHT

JUST as in Trigger Solitaire there is a valuable practice trick for all riflemen, whether they be recruits or experts. It consists of getting down into a prone position and practicing the release of the firing pin five consecutive times without the front sight moving even the slightest.

It may seem like a silly routine to the "know-it-all" but to the recruit who is anxious to succeed and become a crack shot there need not be much coaxing. The piano player or the opera singer spends many hours practicing the diatonic and chromatic scales. If a musical virtuoso needs such routine practice then the rifle virtuoso must similarly practice.

Twice a day—during off-duty periods—will go far toward producing that expertness of Trigger Control which will bring dividends in confident shooting. Keep the practice periods down to ten consecutive shots, each time.

How to Fire Bullets and Influence the Enemy

As your Mother bakes delicious pies,
And the growing baby louder cries,
And your best girl rolls her big, blue eyes—
It's practice, Brothers, **PRACTICE!**

As the golfer breaks more tricky pars,
And the salesman sells more shiny cars,
And the drunkard darkens all-night bars—
It's practice, Brothers, **PRACTICE!**

As the MP growls "Show me yer pass!"
And the brindle cow seeks greener grass,
And admiring ankles you shout "Some class!"
It's practice, Brothers, **PRACTICE!**

So here we've given the basic rules
Of using the marksmen's battle tools.
Follow them well and don't be fools.
Just practice, Brothers, **PRACTICE!**

Practice is the SWEAT that saves YOUR BLOOD and TEARS

COIN GAMES

PERFECT Trigger Control can be approached by placing coins and an empty .22 calibre shell upon the foresight posts. The coins should be of 50, 25, 5 and 10 cent denominations.

Placing the coins, one at a time upon the two posts protecting the front sight, have each recruit squeeze the trigger to release the firing pin five consecutive times without the coin falling. A miss means that the recruit must start over again.

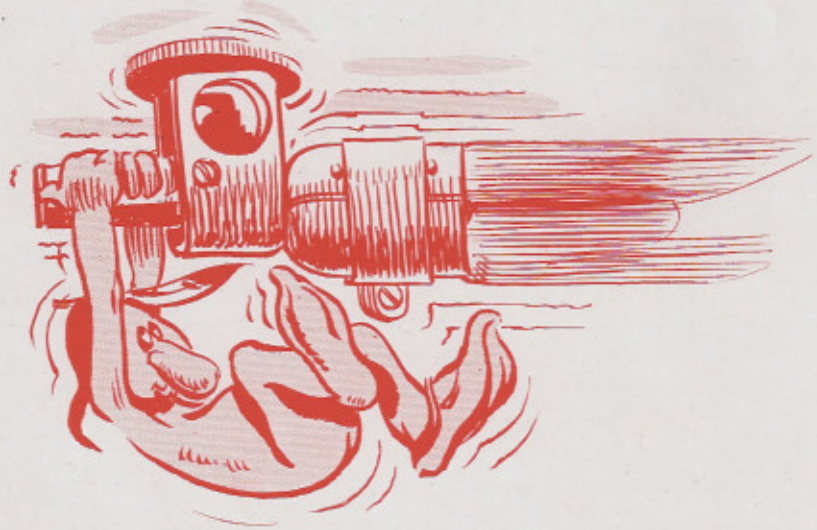
It is best to work these tests in pairs. As one man engages in the test the other should place the coin in position, removing it only to permit the firer to cock the weapon and then replacing it.

As the 50-cent piece is mastered the recruit should rest and allow his associate to try it. Then the first firer should try the 25-cent coin while the helper rests and so on until the five-cent piece and the dime have stayed in place for five consecutive shots each. Note Figures 1A, 1B, 1C and 1D, opposite.

IT IS ESSENTIAL THAT THE RECRUIT REST BETWEEN COIN TESTS.

Now to make it especially certain that the firer can hold his rifle steady and exert the correct pressure upon the trigger, place an empty .22 shell upon the top of the muzzle as in Figure 2. Make certain that it will remain there for five consecutive shots.

If he wants to vary the location of the shell he can select sites as indicated in Figure 3. These are somewhat more difficult.



TRIGGER CONTROL GAMES

FIG. 1-A

FIG. 1-B

FIG. 1-C

FIG. 1-D

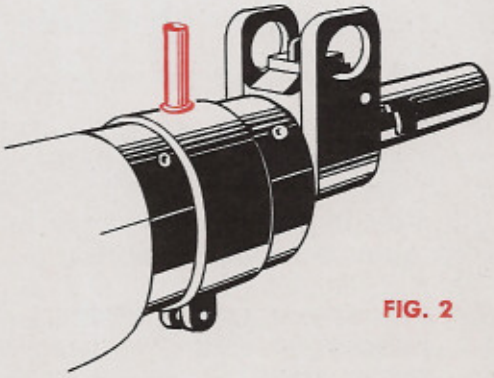


FIG. 2

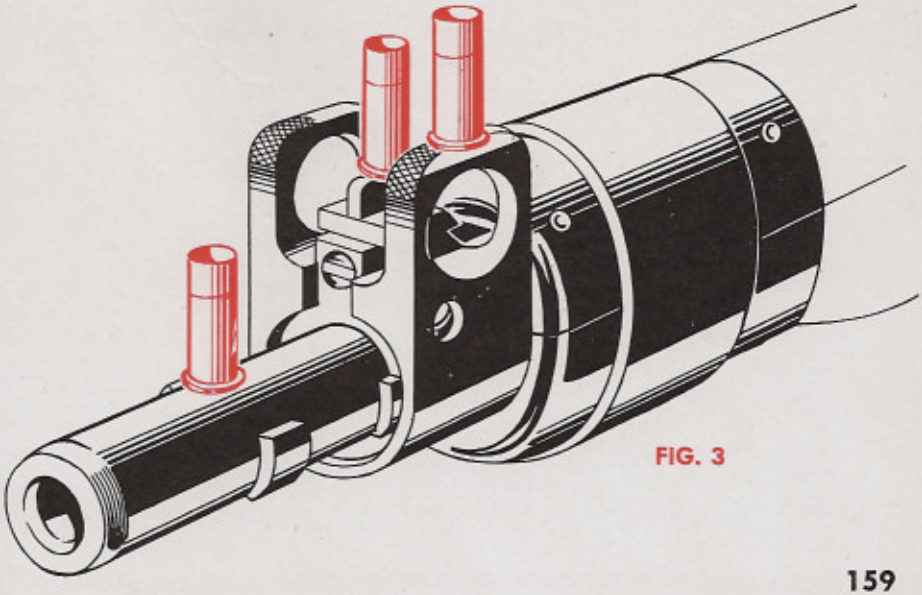


FIG. 3

RECAPITULATION

SUMMING up Trigger Control, the points to stress and practice, practice and stress and then practice again, are:—

1.—Trigger Control occupies 65 percent of the importance scale of Good Marksmanship and is thirteen times as important as Aiming.

2.—Practice of Trigger Control is a first, last and always requisite but it must be taken in easy and frequent doses.

3.—The trigger slack must be taken up first.

4.—The trigger squeeze must be slow, steady and cumulative like a thumbscrew. It must not be jerky, stuttering or unsteady.

5.—Don't try to anticipate when the firing pin will be released.

6.—The middle of the forefinger should rest upon the middle of trigger so that both will operate to the best leverage advantage.

7.—The trigger should be drawn backward and upward at a 45 degree angle to the axis of the rifle.

8.—The trigger squeeze should be so steady that it will not jar the front sight, the slightest. If the front sight does wander, the forefinger should pause before continuing to increase the squeeze.

9.—Understand and practice Follow Through and learn to accurately call your shots,

and

Practice Every Day!—

—Several Times a Day!

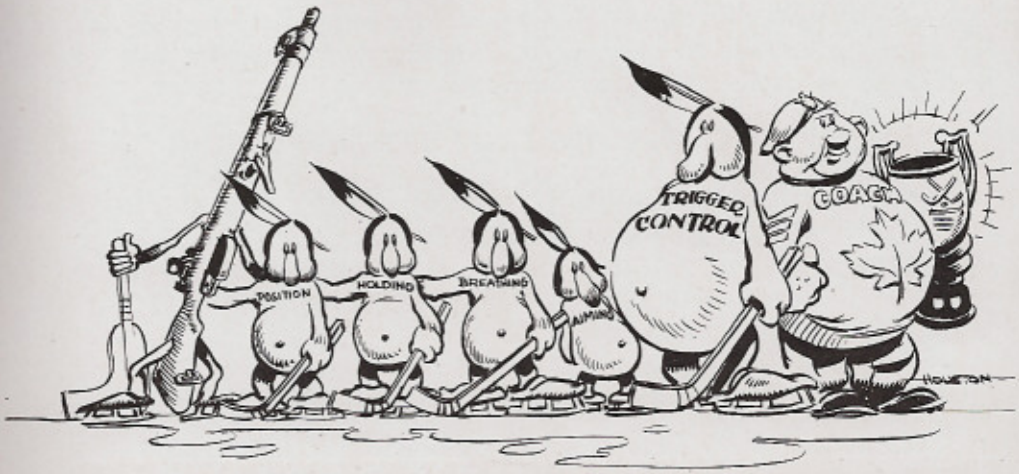
CHAPTER SEVEN

Co-ordination

THE hockey team that plays with complete teamwork wins the championship. There must be complete harmony among the members of the organization, each being thoroughly trained by an expert coach to do the specific job to which he is assigned.

The goal tender must know precisely how to stop all the opponent's shots. The two defence men must know when and how to body check or to seize the puck for glorious, thrill-inspiring rushes down the ice. The centre must be the rover who is all over the skating surface and the two wing men must know how to share the puck with others who are on the team and be able to make passes within their on-side lines. They must all be precise and on-the-button with every play.

Let us pretend that you and your rifle constitute a hockey team which we will call the "Basic Principle All-Stars". The rifle can be the goal tender because it is the means by which goals should not be scored against you. We will put Correct Position and Good Holding at the two defence positions because they are the solid types. Then we will put Trigger Control at centre ice because he is the key man of the whole team. The two P-Boys, Precise Aim and Proper Breathing, will be on the wings. "Sarj." Instructor will be the manager-coach. And let us further pretend that we are playing the "Enemy Six". The championship is at stake, and this is the last period of the series' last game and the score stands at "0-0".



Will your team work as such or will there be a weak member? Will every player do his own job, perfectly and precisely? Will they work smoothly, together?

They will act as a CO-ORDINATED whole. They won't be individualists, each trying to do a job in his own way. They will make every play precisely the same way each time. They will come down the ice, always in the same correct spot to give and receive passes. They will work together with the mechanical exactness of finely-tooled gears.

In shooting, the five Basic Principles must all function together, in exactly the same way for each shot, in order to produce perfect teamwork. This is easier to say than to do but every little trick about perfect position must be done automatically. Everything about perfect holding must be done just right. The proper sigh must be correctly taken as if it were the most natural thing to do. You must aim with precision and then you must squeeze the trigger gently, steadily and deliberately when your front sight is perfectly directed to the point where you want your bullets to hit.

If you can do all these, in the same way for each of five consecutive shots, your five bullets will make clustered holes upon the target so close together they can be covered by the unpointed end of an average lead pencil.

BUT just let down a little bit on one of these Basic Principles. Get careless with the position of the elbows (like the hockey wing man who is not in position to take a pass). Or fail to place the butt of your rifle against the shoulder muscle pad. Forget to properly place your head upon and against the butt. Pass up the backward pressure of your two hands. Miss the steadying sigh. Fail to focus your Master Eye through the aperture of the back sight to the tip of the front sight (just like the centre player who after a brilliant rush down the ice shoots the puck wide of the goal). Or neglect any one of the many of things you have been taught to do and your shots will go wild. You may be perfect on three or four shots but if you missed one little item, no matter how seemingly insignificant or unimportant it appears, then you can expect an Orphan Annie on your target card.

YOU MUST DO EVERYTHING YOU HAVE BEEN TAUGHT TO DO AND NOTHING MORE NOR LESS. YOU MUST DO IT IN THE SEQUENCE IN WHICH IT WAS TAUGHT TO YOU AND IN EXACTLY THE SAME WAY EACH TIME, SO THAT IT WILL BE PERFECTLY PUT TOGETHER INTO ONE, COMPLETE SERIES OF MACHINE-LIKE, PRECISIONED OPERATIONS, BLENDING TOGETHER TO BECOME ONE WHOLE.

Miss one and you have missed them ALL.

CORRECT USE OF SANDBAGS

SAND BAGS are provided for recruits in their preliminary learning of good shooting and in their range work. They serve to steady the lower half of the left forearm, only. The fact that an embryo marksman spends tedious periods in the prone firing position necessitates this consideration of his comfort and welfare.

As his ability to shoot properly is slowly acquired, the need for the sandbag will diminish. He won't have a caddie or a busboy running around after him with a sandbag when he gets onto the battlefield although he may find support for his left forearm in the natural characteristics of his slit trench.

In the heat of battle he won't take time to seek some object to rest his elbow against because the muscles of his arms will be so sufficiently well conditioned that he can fire accurately with or without such assistance.

The sandbag should contain from one-half to three-quarters of its capacity of earth. The bag should be tied tightly at the top of the sack so as to provide a looseness to the shape which the bag will take.

If you will note Figure 1, below, the bag has to be placed to FIT THE MAN — NOT the man's whole position altered to fit the bag. The forearm and elbow should be partly surrounded by the bag which should be shaped like an over fat letter "U". In fact it should look somewhat like a pair of inflated water wings.

The wrist and hand *MUST NOT TOUCH* the sandbag or rest upon it. Anyone who pulls that bogey on you is a gremlin. Don't fall for it. The bag only steadies the LOWER part of the left forearm.

FIG. 1

THE SANDBAG SHOULD BE "U" SHAPED, AND

NOT TOO FULL!

THE SANDBAG IS USED TO SUPPORT THE FOREARM—

NOT TO CARRY YOUR RIFLE!

THE TWO-FOOT CIRCLE

THERE is only one place where the coach can do his job efficiently when his pupil is on the range and that is to be as close as possible to the pupil without interfering with his shooting.

The correct place is down beside your recruit so that his head and shoulders are enclosed within an imaginary circle, two feet in diameter and centered approximately at the firer's right hand.

Note Figures 1 and 2 opposite to see the application of this circle to good coaching. Figure 1 portrays the location of the circle while Figure 2 shows the coach's position with respect to the circle.

In this way you are close enough to the recruit to *lightly* place your hand upon his shoulder and check for body tensions, position and breathing rhythm.

You are close enough to him to permit you to check his pre-firing sigh, his trigger squeeze and the performance of his eyes during the sighting and firing process.

You will be able, also, to observe whether he flinched or blinked. You will be able to check his backward pressure, his head and chin pressure and most of the vital phases of the preliminary training which you have given him.

Moreover you are near enough to give him words of advice and encouragement which will put him on the proper track toward becoming a good marksman. Remember, this recruit is now trying to put into effect all you have taught him and he will need your quiet, patient help.

The two-foot circle also permits you to keep a check and call card, a most valuable aid to good coaching but which will be explained in the chapter "Target Analysis".

The two-foot circle is the proving ground.

FIG. 1

FIG. 2 — POSITION OF COACH AND PUPIL

To Instructors!

The preceding chapters have dwelt solely with the teaching of perfect Marksmanship. They have contained the material which should be taught to the classes of recruits.

All the phases as outlined in the chapters dealing with Basic Musketry Principles have been carefully presented in text and illustrated material.

The following chapters are given solely for your benefit. They will provide you with the information which, with serious application, will give you that expertness all keen instructors continually seek.

The material which follows is for YOU only and is NOT to be taught to your classes. The only exception to this is in the teaching of Rapid Fire and Snap-Shooting which is an advanced phase of musketry.

The following chapters give the methods by which your course can be successfully presented and then accurately appraised.

—THE AUTHOR.