

CHAPTER THREE

Holding

"HOLDING" a rifle is a frequently misused expression because actually a rifle should not be held. It should, instead, rest upon the bones of the body to secure that stability which is so necessary.

The use of brute strength in clutching the weapon only aggravates a condition which the recruit is trying to avoid. Yet it is that condition which causes the rifle to be unsteady.

Tensed muscles pass along vibrations which the rifle naturally picks up. The more tension or strength used in gripping the rifle usually means more vibration. Relaxation is, therefore, the answer.

Adoption of proper position assures the marksman's comfort and encourages relaxation. In other words, it means that the rifle is pointed with the whole body and not just with the strained muscles of the hands and arms.

Just as an artillery piece consists of a barrel and recoil mechanism mounted on a carriage, so does the Rifleman function. His muscles are the recoil apparatus and the bones of the arms and hands form the rigid carriage.

The left arm should provide a perfect V-shaped support under the rifle while the right elbow is located so as to give it firm but bracing support to the body.

The recruit should concern himself with making certain his position is such that there is no muscle strain of any sort in his arms. That position will be gained through the careful adoption of the correct position outlined in the preceding chapter and will be **ONLY** that position.

***A correctly-held rifle
doesn't kick***

**DO YOU SUFFER FROM
UNNECESSARY RECOIL?**



HOLDING—Continued

Every beginner has been faced with the EXASPERATING PROBLEM OF KEEPING THE RIFLE STEADY LONG ENOUGH TO SEND A BULLET SPEEDING ON ITS WAY. Usually the muzzle of the rifle circles and zig-zags all over the range and the more he grimaces and grips in trying to hold it still the more it jumps around. Practice of proper position is the prime cure.

If you can check the before and after results, you will see that at least one quarter of the movement has been lost in your adoption of the proper position, religiously practiced.

When it comes natural for a recruit to assume the proper position, his dancing rifle has quietened down. Proper holding, equally well practiced, will slice another quarter off the unsteadiness total.

By the time the course is finished the newcomer to the field of perfect musketry will be able to nick the heart of a bull's eye every time.



BONES versus MUSCLES

YOU will recall that in the preceding chapter you, as the instructor, proved to the recruit the strength of a perfectly-acquired position, by sitting upon a rifle when it rested upon solid bone. Your recruit was amazed at the strength provided by the vertical position of the left arm. When the recruit held his rifle in a low vertical triangle, with the left elbow out of its proper place, you were able to force it downward with your two fingers and thumb because he was attempting to support it solely by means of strained muscles.

Referring to the illustrations accompanying this phase of "Holding," note the strength provided by the bones as compared with that of the muscles. In Figure 1, opposite, the solidness of the weight resting squarely upon the upright stick is obvious.

In Figure 2, you will notice, in the left picture, that the soldier has his left elbow out from underneath his rifle and that the muscles must be holding it in place. In the opposite picture, he is shown with the correct position—a perfect, vertical triangle and the rifle is solidly resting upon the bones of the upright forearm.

If X-ray photographs of the two arms, shown in Figure 2, were to be obtained, they would reveal, as in Figure 3 (left), the off-centre effect of incorrect position with no support upon which the rifle may rest, except the trembling, strained muscles. Now compare this with the upright pillar of bone established by the correctly-placed left elbow (Figure 3, right).



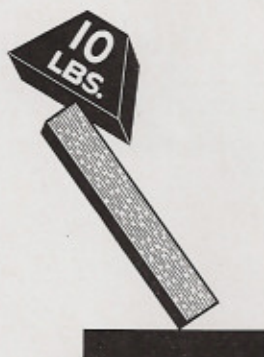


FIG. 1



FIG. 2



**DON'T HOLD IT WITH YOUR
MUSCLES**



**SUPPORT IT WITH YOUR
BONES**

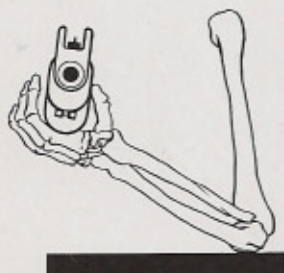


FIG. 3

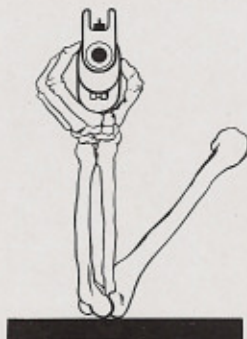
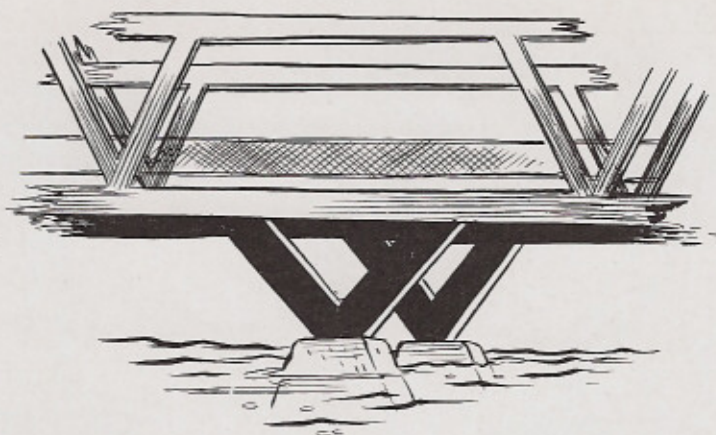


FIG. 1



FORMING A BRIDGE TRUSS

THE engineering principles, manifest in the construction of a bridge, serve as an ideal example of the soldier seeking that solid foundation of bone upon which his rifle is to rest.

You will recall that steel girders rise up V-shaped, from the abutments of certain bridges, so that they carry the weight of the structure solidly. Note the illustration, above.

These V-shaped, solid, weight-supporting girders serve the same purpose as your two arms. The elbows are at the base and the weight of the body and the weight of the rifle are evenly supported by the V for strength and firmness, formed by the bones of the upper arm and forearm. See Figure 2, below.

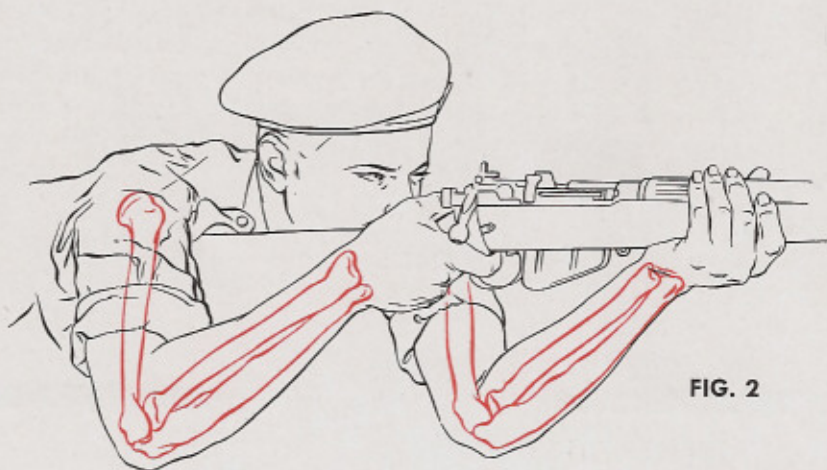


FIG. 2



**THROUGH PROPER INSTRUCTION IN HOLDING
THE TRAINED COACH CAN OVERCOME THE
PUPILS' FEAR OF RECOIL**

A SCAFFOLD OF BONES

THERE are 206 bones in the human body and they all serve as a scaffolding to support you and your rifle, in that co-ordination that is known as good shooting.

To prove this, your attention is called to Figure 1, below. Using laths to represent or demonstrate the position of bones, we place one along the inside of the left forearm of the recruit, who is in proper prone firing position. It will extend from the point of contact of the hand with the rifle, down to the elbow.

Now place another lath from the shoulder to the elbow, along the inside of the upper left arm. This portrays one of the V-shaped supports for your rifle to rest upon.

Next place a lath along the outside of the right forearm, from the top of the hand to the elbow and another lath from the outside of the right shoulder, to the elbow. There you have a second V-shaped truss.

Then, just to bring these two trusses together, you place another lath across the shoulders so that it meets the tops of the laths, which rest alongside the recruit's upper arms.

The arms and the upper body now appear to give almost complete and co-related support to the rifle, like so many girders of a well-constructed



FIG. 1

A SCAFFOLD OF BONES—Continued

bridge. The only place where the support is lacking, is an inward pressure at the butt. A final lath, slanted from the floor to the left side of the head, will naturally represent the pressure exerted by the chin against the butt, thus completing the picture of a solid structure. This last lath is the counter brace which steadies the bracing of the right forearm.

Note Figure 2, below, where the body's bones are likened to a solid block of timber, bolted to the floor, while in Figure 3 the "rifle" is supported by a scaffolding attached to that block in much the same manner as your bones support it and as you demonstrated to your recruit by means of laths.

FIG. 2

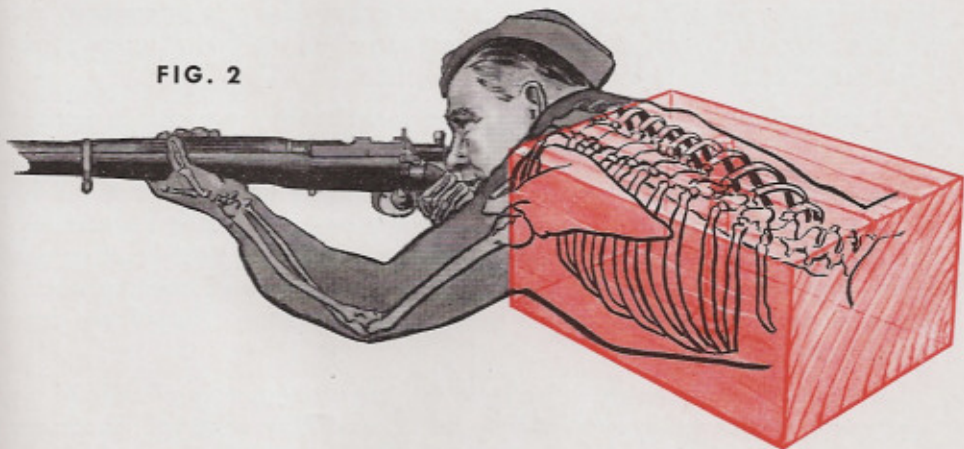
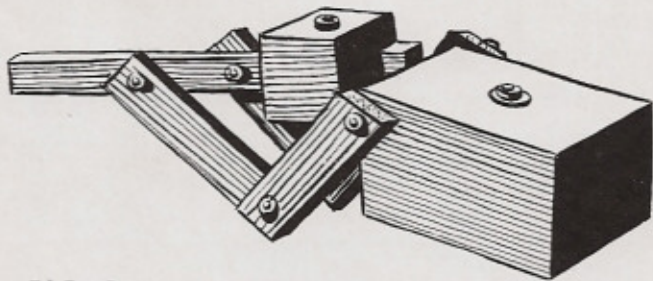


FIG. 3



VIBRATIONS AND TENSIONS

A COMMON tendency on the part of many recruits is that of gripping the rifle with brute force and determination to hold it still by muscular effort. The more they grip and grimace, the more taut the elastic-like muscles become and these in turn quickly pass their vibrations into the rigid rifle and the muzzle starts to dance around.

No amount of muscular effort will correct this condition.

As much stress has been placed on the correct resting of the rifle upon the framework of bones, you will find that your recruit will feel that as he has such a solid position he can improve it still further by a tight grip. But his muscles cannot do the work of his arm bones in holding a rifle still.

You will note that the muzzle of his rifle is showing much movement. You should insist that he relax himself, so that all undue pressure is eliminated. Naturally some pressure is required, in order to keep the rifle in position, but he does not have to go to extremes, because the effect will be lost in the vibrations passed from the tensed muscles to the rifle.

All body vibrations cannot be totally eliminated but by a reasonable amount of relaxation, the vibrations will be reduced to a minimum.

It is best to watch your recruit, as he lies in firing position, for it will be your sole means of determining whether or not he is tightening his muscles. If it is difficult for him to appreciate the vibration effect of tight muscles, ask him to raise an arm so that his hand hangs limply downward from the elbow, while the upper part of the arm is parallel with the floor. He will see very little tremor in his fingers.

Let him raise his hand up to his face, without changing the position of his upper arm, and he will note tremble in his fingers. Now, if he will clench his fist, he will see a marked increase in the tremble.

By this it is not meant that limpness is the solution to good shooting. Some muscular effort is required in holding the rifle but certainly this effort need not be excessive.

In all phases of musketry training, the instructor who encourages his men to be calm, collected and not excited or under tension is the one who produces the best shots.

HEAD AND CHIN

NOW that the solid truss work has been built for the structure which will firmly carry the rifle, one important span is required to finish the job and it must drop perfectly into place so that it will bind together the trunk of the body, the V-shaped supports of bones and the rifle.

That needed span is the head and it forms the keystone around which the entire rifle-firing structure has been organized.

The head must fall into the place provided for it. Hence, the recruit should be impressed with the fact that his neck muscles must be relaxed so that the head will naturally fall forward upon the butt and rest there comfortably.

Just as relaxed muscles have been stressed in earlier phases of this training, so must your pupil be impressed with the weight of the head and its effect upon good shooting.

If the upper body is allowed to sag freely forward without muscular effort, so that it will rest solidly on top of the butt, its steadying effect will immediately become apparent.

There it will serve as the clevis which attaches the barrel of the artillery piece to the carriage and recoil mechanism.



"RELAXATION"

HOW TO PLACE THE HEAD

THE HEAD must fit into its proper place, however, when it falls forward. This place is determined by the recruit taking up his prone firing position and placing his chin over and upon the top of the butt (Note Figure 1, below).

Without drawing his head away from the butt, he should cause the chin to move over and down the inside of the butt, as in Figure 2, until the right eye is in direct alignment with the aperture of the rear sight (See Figure 3).

If this has been done properly, the chin will be firmly pressed against the butt so that it seems to be a part of the butt itself—just as if both were bolted together.

But the chin cannot be permitted to fall too low. A brake must be applied and this is done by a sideways pressure of the chin and cheek against the butt at the precise moment the eye is opposite the aperture of the rear sight.

This halts the downward movement of the head as it sags forward against the butt. Frequently this is done by stopping the downward movement at the slight hollow which runs along the lower side of the chin. This hollow may vary according to the contours of various faces but in most cases it can be readily determined.

It is imperative that the pressure of the chin, imposed by the weight of the head, be sufficient to serve as a counter brace to the supporting effect of the right forearm and also be a means of keeping the eye in place so that it can see through the rear sight.

The eye must be as close to the rear sight as safety will permit. If too close, it might be struck by the rear sight when the rifle recoils.

The solidness imposed by the head resting on top of and against the butt will permit the head to ride with the butt, when the rifle recoils upon being fired. Both should react as one.



FIG. 1



FIG. 2



FIG. 3



TESTING CHIN PRESSURE

IT IS NOT intended that the pressure of the chin against the butt should be excessive. Otherwise unnecessary strain will cause the unwanted tremors of the head to be imparted into the rifle just as too tense a grip of the rifle causes tremble.

There are two methods of teaching chin pressure and they should be carefully shown to the recruit so that he may get the feel of the pressure you exert upon your rifle and then compare it with his own pressure.

One method is to have him place his first and second fingers along the butt of the rifle, which you are holding, at the point where your chin should press against the butt (See Figure 1, above). Slide your chin over and down against the butt and his fingers and as he draws the fingers away he should feel the pressure which you are **NORMALLY** exerting.

Another method of checking would be to place a folded strip of paper, about twelve inches long, between the cheek and the rifle (See Figure 2). Have the recruit withdraw the paper by means of short, sharp, directly-upward tugs and he will note how the paper crackles because of the normally-exerted chin pressure.

HEAD IS KEYSTONE

YOUR recruit will now see that his head has become the keystone which completed the solid arch of bone (See Figure 1, opposite), upon which the rifle is firmly but comfortably resting.

It has the steadying effect of a sandbag which will bind the entire rifle-holding framework tightly together as if it were precisely fitted and perfectly welded.

It has rolled forward just as a sitting sleeper's head falls forward. (Note Figure 2, opposite). Neck muscles are relaxed and the head rests upon the pillow which is the butt.

At least one third of the head will overlap the butt, insuring proper position of the head and also insuring correct chin pressure.

THE SHOULDER

THE greatest bugbear in shooting is fear of the rifle's recoil hurting the shoulder. The so-called "kick" has been over-rated, largely because the novice rifleman has heard, so many times, that a rifle has a terrific recoil which will hurt him. In his effort to avoid a sore shoulder, he sacrifices shooting skill.

Instructors must appreciate the serious responsibility of seeing to it that each recruit has his rifle against those muscles and not against bone, as the success of this training depends largely upon the removal of recoil fear from the minds of the troops.

Watch out, however, for suspender buckles or other hard objects which might spoil the effect of the muscle pad.

The proper location of the rifle against the shoulder muscles, and not against solid bone, reduces the effect of the recoil to a minimum that is noticeable and certainly never injurious to the soldier.

FIG. 1

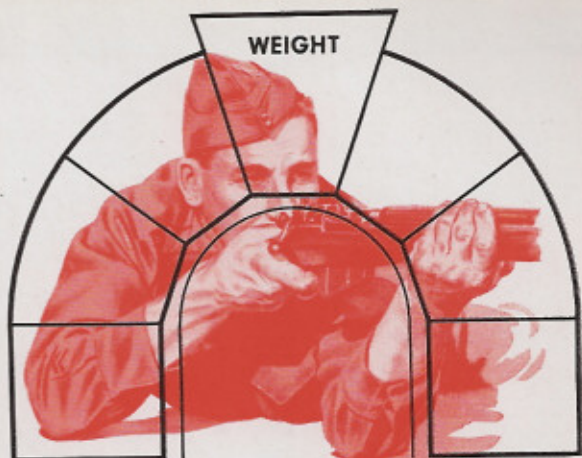


FIG. 2

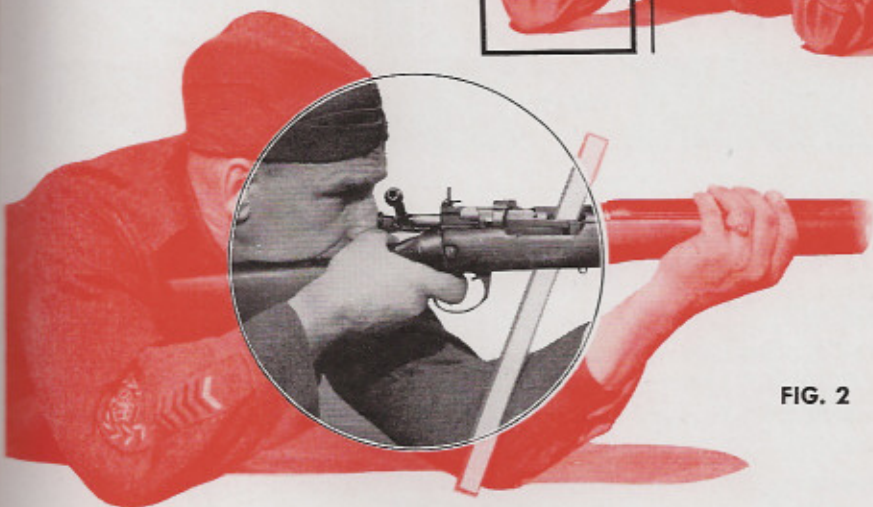




FIG. 1



FIG. 2



FIG. 3

COLLARBONES

TO DETERMINE the proper location of the rifle, it is first necessary to study the recruit's collarbone structure, so that in placing the rifle against the shoulder he will avoid having any part of the butt resting against solid bone. The recruit should be stripped to the waist, in order to clearly understand your demonstration.

If there are several members in your class, you will be able, by tracing collarbones with your fingers and coloured chalk, to determine their shape and type. You will learn whether each collarbone examined is slightly curved as is the normal type shown in Figure 1; or whether it is a low, flat bone as shown in Figure 2; or a highly-curved one as in Figure 3.

It will be of help for the entire class to observe these three types of collarbone structures, which may be demonstrated with a horizontally-held ruler upon the chalked outline of the collarbone. Each man should know what type of collarbone he possesses and the instructor must be thoroughly satisfied that he does know it.

Now call the attention of the class, to the fact that forward parts of the collarbone structure are only thinly covered with skin and are not protected by blow-absorbing flesh or muscle. A blow struck against such a bone would bruise the skin and probably injure the collarbone. That is why football players wear those big shoulder pads.

You can effectively demonstrate this to your recruit, by tapping the collarbone structure with your finger or knuckle. Your recruit will feel the solidness of the thinly-protected bone and hear the ringing sound of the tapping. He will also appreciate that a rifle's recoil would injure the unprotected collarbone.

MUSCLE PADS

OBERVE next, that the recruit has a large pocket of muscle directly below the collarbone. Digging around with one's fingers it can be quickly and clearly located. Find it for the recruit and let him feel it. This muscle pad is the area upon which the butt must rest. See Figures 1 and 2, below.

It will be noted that the rifle, in resting against that pad, is virtually leaning upon a cushion of muscle, as comfortably as if it were sitting upon a pillow of sponge rubber.

The instructor MUST (This is an ORDER) clearly point out, personally, to each recruit, the exact location of that muscle pad so that each recruit will know precisely where it is.

What does this muscle pad do?

It serves as the cushion for the recoil. It is the spongy shock absorber that prevents injury and dispels fear of the rifle's kick.

FIG. 1

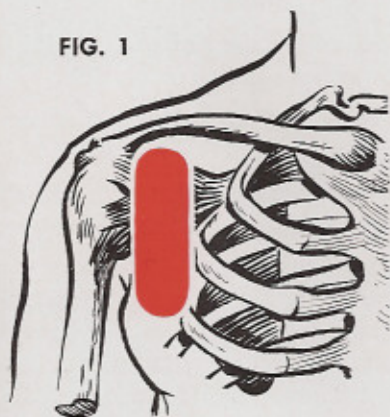
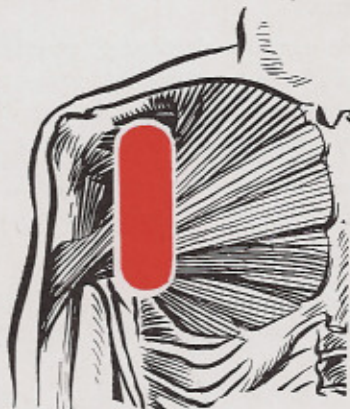


FIG. 2



PLACING THE RIFLE

INSTRUCTORS may now teach the recruit (who is still stripped to the waist) how to get the rifle onto this shoulder muscle pad.

With his right hand, have him slip the butt plate into the hollow of the shoulder so that it rests upon the muscle pad. This should be done while the right elbow is raised, to enable the right hand to take a solid grip of the small of the butt (Note Figures 1, 2 and 3, opposite).

He should now drop his right elbow into its proper position and allow the head to slide into place so that the cheek provides the firmness against the stock, that is required (see Figure 4.)

This little trick of slipping the butt into the muscle pad, while the weight is carried by the left elbow, is a secret of good shooting and its importance is such, that it should be used each time the recruit assumes his firing position.

The recruit will see that the butt plate is—or should be—well into the pocket of muscles and NOT against the collarbones, or the arm muscles.

He will probably also see that when he raised his right elbow to assist him in placing the rifle, the muscle pad was extended so that he could place the butt more accurately.

This factor is particularly helpful to soldiers who are of slight build and who sometimes experience difficulty in the proper placing of the rifle.

Check your recruit by chalking the end of the butt and placing it where he considers the muscle pad is located.

Now have him remove the rifle, and the chalk mark on the skin will show exactly whether or not the rifle was properly placed on the pad where it belongs.

This sure-fire method of checking will be appreciated by the recruit, who by now, will consider that you are looking out for his own personal welfare. It will impress upon him the fact that there is a correct way in which to avoid injury from the rifle's recoil because what you have taught him is sensible.

Have your recruit practice this placing of the rifle until he has the natural "feel" of the butt plate against the cushion.

Get the rifle-placing habit.

PLACING THE RIFLE



FIGURE 1



FIGURE 2



FIGURE 3



FIGURE 4

AMOUNT OF BUTT ON MUSCLE PAD

TO INSURE that the recruit places his rifle correctly on the muscle pad and not on the collarbone or the arm bones, have him adopt the correct position and lower his rifle. Now stand over him, insert a finger under his collarbone and with your other hand raise the heel of the butt until it touches this finger. Observe the illustration, below.

You can also check the amount of butt in contact with the muscle pad by running your thumb up the butt plate from the toe, to the point of contact with the body. If your recruit is a plump lad there will be more of the butt plate covered by muscle than what you may find with a soldier of slight build.

Types of collarbones also affect the amount of butt which a soldier can rest upon his shoulder muscle pad.

Obviously, the greater amount of butt plate upon the muscle pad, the greater the resultant cushion effect. It is only seldom that all of the butt will rest upon the pad. There are so many differences between physiques that as long as your pupil has as much, as possible, of the butt properly located and NONE of it on the collarbone, he will be safe from hurt shoulders caused by recoil.

The inserted picture (left and below) of the butt plate shows approximately the amount of butt plate (red area) which rests upon the muscle pad of soldiers of normal physique and collarbone structure.



CONTROL OF THE RIFLE

WHEN the trigger is squeezed, the resulting explosion creates so much pressure that all of it cannot chase the bullet on its flight to the target.

Thus, there is a tendency for the explosion to react upon the rifle so that the weapon "wants to go some place" to escape the blast. But it has little opportunity to do so because it cannot leap nor lurch if it is properly held.

Of course, if it cannot go forward, or down, or to either side, it will want to rear backward and that is its recoil.

Later in this chapter, the movement of the rifle upon discharge will be fully discussed.

The hands, as they hold the rifle, the weight of the head, the chin pressure and the pad of muscle in the shoulder, all unite and co-operate to arrest the recoil.

But this control can only be effective if it is done in such a way that each controlling agent does its full duty—nothing more nor less. Too much backward pressure by the hands, or forcing the head forward onto the butt of the rifle so that more pressure is built up than is normally apparent in the weight of the head, would spoil the effect of other control.

Control your rifle in the normal manner, doing everything that you are expected to do and doing it well, but don't strive toward one operation to the exclusion of all others.

SNUBBING EFFECT OF THE HANDS

YOU HAVE told your recruit to firmly grasp his rifle, yet without gripping it so tightly that body tremble would be passed into the rigid weapon.

It is natural for him as he lies in normal position to draw the rifle back into the muscle pad snugly. He knows, by now, that this pressure against the muscle pad assists in keeping the rifle firmly placed there. He does it naturally—or at least he should. This is a factor which the instructor should carefully check upon.

While the rifle is correctly held, the two hands serve as snubbers when the recoil occurs. To demonstrate this, place your hand upon the barrel of your recruit's rifle and move it backwards about two inches toward his shoulder.

As you do this, call the recruit's attention to the fact that his hands absorbed much of the movement. He will thus appreciate what happens during the recoil process, when the rifle's backward movement is partly arrested by this snubbing effect, of the two hands.

CHECKING BACKWARD PRESSURE

NATURALLY, the correct amount of backward pressure exerted by the hands, in drawing the rifle into the pad of shoulder muscles, must be determined for the benefit of the recruit.

The instructor should take the correct firing position, then have the recruit place a lath upright directly in front of and one-half inch beyond the muzzle (See Figure 1, opposite). Now warn him to observe the forward movement of the muzzle as the backward pressure is released.

He will note that the right hand is released first from its grasp of the rifle which will, however, remain still.

When the second step is taken by opening the left hand flat, the rifle will be forced forward, along the open palm, by the reactionary effect of the spongy shoulder muscles. It will travel approximately one-half inch and will likely touch the upright lath. See Figure 2. The demonstration should be given several times, so that the recruit will see exactly the effect of the backward pressure.

Then have the recruit try the experiment while you hold the lath. Don't permit him, however, to force the rifle forward by any movement of the shoulder. In other words, he must not nudge it forward. It must glide ahead as a result of releasing the pressure against the muscle pad.

Have him practice this checking experiment until he is thoroughly accustomed to the proper amount of backward pressure required.

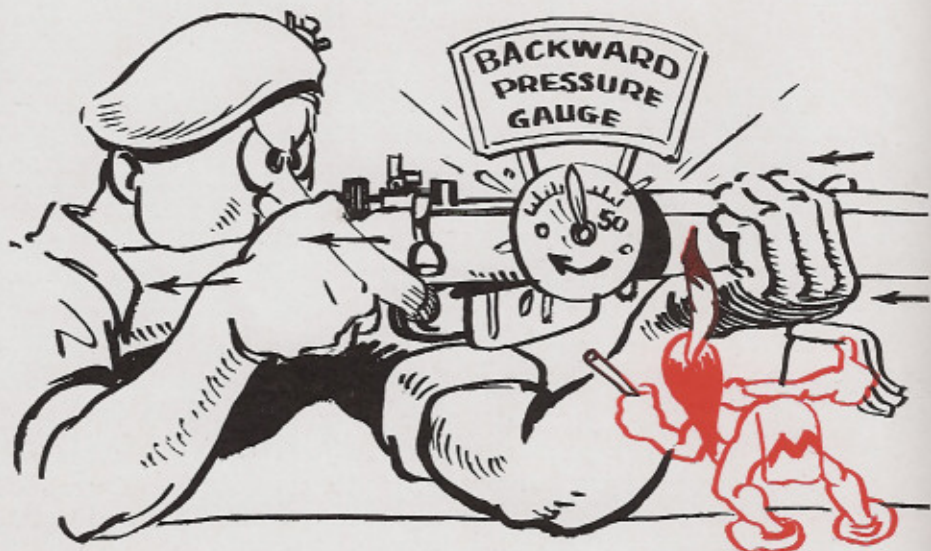




FIG. 1



FIG. 2



FIG. 1



FIG. 2



FIG. 3

SOLID HOLDING

THE RIFLE must become just as much a part of the soldier as his arm or leg, if he hopes to become a good shot. There must be co-operative teamwork between him and the weapon, if the bullets he fires are to pierce the centre of the target.

Your attention is called to the demonstrations illustrated in Figures 1, 2 and 3, opposite. In Figure 1, you will be able to show your recruit that while he is in proper firing position you can take his leg and with a steady push, or pull, shift him around. If the recruit is holding his rifle properly, it will be so much a part of him that it will move with the push or pull, also.

Using a steady, straight and forward pull (not by jerking or drawing, up, down or sideways) bring his rifle forward toward you. His entire body will move with the pull if his grasp of the rifle is solid. Note Figure 2.

Reversing the procedure, as illustrated in Figure 3, shove (or attempt to) the rifle directly backwards. You will find it exceedingly difficult to budge the soldier. If he does move with the shove, it will be very slight.

Thus a solidly-held rifle cannot be dislodged. It has become every bit as much a part of him as an arm or leg and working in unison with the body is as solid as a block of granite.



BLOW versus SHOVE

THE SECRET of good holding in rifle-shooting so that recoil is arrested, amounts generally into transferring the blow of the recoil into a shove. If you walk up to someone and deal him a punch on the shoulder, he will go down with a sore chest. But if you place your fist against his shoulder and then shove, his muscles will naturally react to absorb the pressure. He will not be hurt.

Note Figure 1, opposite. Where the shoulder of the man on the left has been dealt a hard blow—just like the shoulder of a man, whose loosely-held rifle has recoiled. The man on the right, however, by the correct use of backward pressure and muscular absorption is transforming his blow into a harmless shove.

The comparison is probably not quite so marked, as in Figure 2, which shows a prize fighter's punch on the left as against the feminine hand (right) which shoves aside the wolfish Canuck.

Beginners may acquire all of the tricks of proper position and holding but, because of fear of recoil, will pull away from the rifle at the moment the trigger has been squeezed. That movement causes the solidness of the position to be lost, gives the rifle a chance to wind up a haymaker and also swing off the target.

Have your recruit keep the solid position and drum into him the fact that in correct holding there can be no blow from recoil.

ROLLING WITH THE SHOVE

IF YOU stand up to the batter's box and the pitcher whips the ball directly to your head, you duck out of the way. If the heavyweight boxer was to send his big fist out in the general direction of your nose, and you saw it coming, you would let your head instinctively go back to ride the blow (See Figure 3, opposite).

The same thing applies in rifle shooting. You have taught your recruit that his cheek and head must be virtually bolted to the rifle butt. It naturally has to come back when the rifle is fired, so if your head is placed right it will come back too—IF the muscles in the back of your neck are RELAXED.

It won't come back far. In fact it will only ride as far as the butt travels and then return to its normal position.

This movement, on the part of your head, further arrests the recoil. There will be little noticeable feeling to the action and you will be keeping your eye always at the same distance from the rear sight.

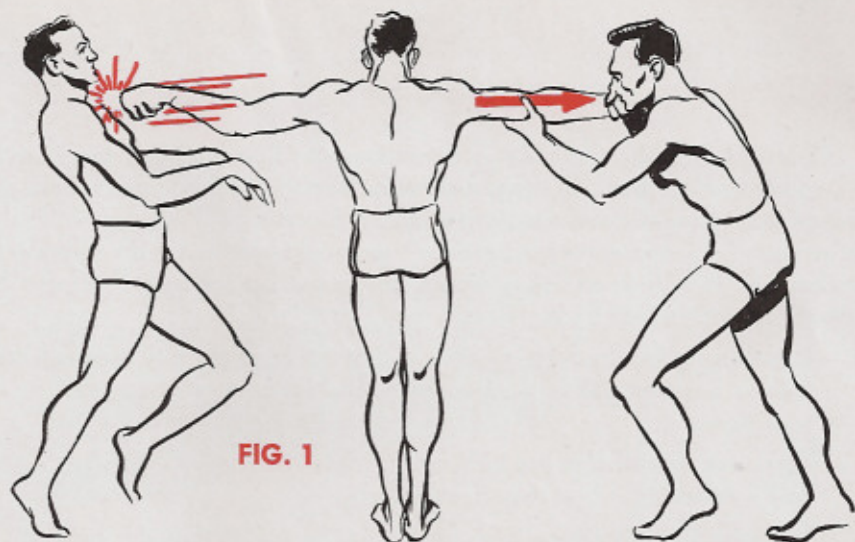


FIG. 1

FIG. 2



FIG. 3



FAULTS AND REMEDIES

A NUMBER of faults in holding, sometimes develop whereby the firer becomes slightly hurt. If these are not corrected quickly, your recruit may develop that curse of good shooting which is flinching.

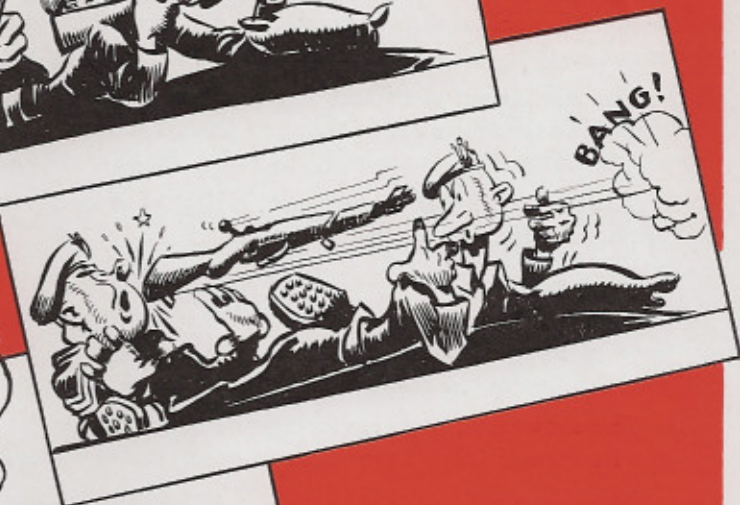
A swollen lip is sometimes caused by the knuckle of the thumb striking the lip when the rifle is fired. To correct this condition, one or several of the following remedies may be applied:

- 1.—Decrease the oblique body angle so that the head and the eyes will come farther back on the butt, to increase the distance of the eyes from the rear sight;
- 2.—Have the recruit ride the butt, or increase his chin pressure, so that he will ride with the butt during recoil;
- 3.—Increase the backward pressure of the hands so that the butt will be more firmly in position on the shoulder muscle pad;
- 4.—Move the right hand closer to the cocking piece so that it will not strike the face;
- 5.—Check the butt length of the rifle. A longer and more correctly-fitted rifle may be needed.
- 6.—Increase the grip of the hands upon the rifle;
- 7.—Encourage the soldier to roll with the blow.

There have been occasions when the thumb knuckle has struck the firer in the nose causing it to bleed. This is usually the result of very loose holding and can be corrected by the remedies outlined for the swollen lip. Stress, however, is again placed upon solid holding.

A cut chin is usually caused by long fingernails, of the right hand, cutting the chin. The cause of this can be traced to the head resting stiffly against the butt so that when the recoil comes it does not ride with the butt as if both were bolted together. Instead, the butt and the right hand move past the chin thus permitting long fingernails to lacerate the lower part of the soldier's face. Here, again, the remedies outlined for swollen lips will apply, together, with a careful trimming of fingernails.

***If a soldier gets hurt, blame
the instructor first.***



Houston

MOVEMENT OF RIFLE UPON DISCHARGE

UNDER the sub-title "Control of the Rifle," at page 53, the movement of the rifle upon discharge was mentioned. There will be movement of the muzzle immediately you send your bullet on its way. The direction that movement takes and the distance it travels are ideal indications upon which you can check the correctness of a rifleman's position and holding.

As the force of the explosion will follow the course of least resistance and when the good marksman is solidly holding his rifle in the cushion of shoulder muscles, there is only one direction the rifle muzzle can take.

The rifle is not weighted down on top of the barrel, and the butt, while resting against the muscle pad, still has no support directly beneath it, so the rifle's movement is naturally upwards. See Figure 1, opposite.

This natural, upward movement is slight but it occurs **AFTER** the bullet has departed from the muzzle.

If the rifle moves either sideways or downward, there is faulty holding.

As you observe the recruits upon the range, you will be able to spot this movement upon discharge and if it is anything but upwards, then the Holding and Position of the rifle are faulty and should be promptly corrected.

This movement amounts to little more than a slight "bounce" upwards, of the barrel and then it should settle back into its normal position.

The observant recruit, at first, will feel a disappointment that the rifle moved at all and he will think that because it went upward that he missed the target.

The instructor should pat this boy on the back because he is shooting properly, he is observant and he is certainly watching his follow through.

Much of the foregoing deals with what actually happens on the range. As your recruit has not been permitted to reach the range as yet, it may appear to be premature to discuss this phase of holding here.

It is, however, important to discuss this topic with your recruits so that they may be properly appraised of all these little tricks of a rifle when it is discharged. It is also important because the recruit feels that now you are getting him closer to the day when he gets onto the range and puts into actual practice all that you have taught him.

***Encourage your recruits
to be observant.***

FIG. 1

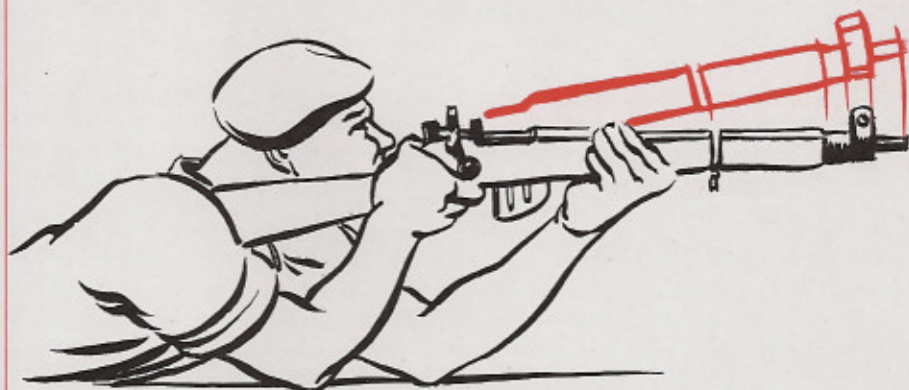
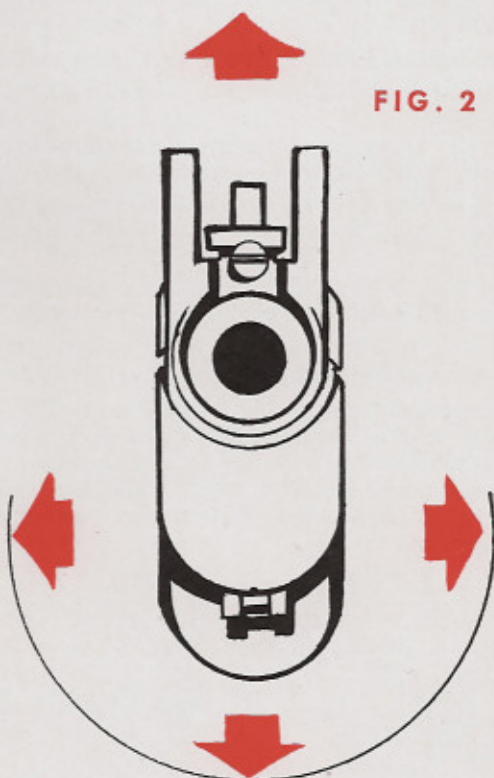


FIG. 2



Summary

HOLDING cannot be over-stressed because it provides much of the insurance against recoil.

If you, Mr. Instructor, have impressed your recruit with the fact that good position taken with good Holding will not only minimize recoil until it becomes a mere shove and that both, together, will assure him of better scores because of the removal of unwanted vibrations, you will have accomplished much toward bringing that boy close to shooting perfection.

This is very important because it scatters from his mind old ideas and bad habits about shooting. If properly presented it should remove his fear of the rifle's kick and if you have done your job efficiently he should commence to see the objective of your teaching because through acceptance of logic he now understands the reasonableness of what he has been shown.

Thus it would be well to just check back on these phases of his instruction:

- 1.—Have you sold him on the use of bones instead of muscles so that he provides a bridge truss or scaffold of bones which arrest vibrations and tension?
- 2.—Does he know how to place his head and fully appreciate the work it does when the chin pressure is applied?
- 3.—Is he so well aware of the muscle pad below his collarbone that he automatically places the butt of his rifle upon that pad and not upon bones?
- 4.—Does he understand how his two hands serve as snubbers when backward pressure is applied?
- 5.—Are you satisfied that his head will roll with the shove of the butt when the rifle is fired?

If your recruit is perfect in these fundamentals he may be taken to the next phase of this course. Don't proceed unless both you and he are perfectly satisfied that he fully understands all you have taught him about Position and Holding. He should be given ample opportunity to practice what you have taught so that his acceptance of it is correct and automatic.



Remember—

If the FIRER hasn't

LEARNED

The INSTRUCTOR hasn't

TAUGHT!