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CANADIAN ARMY

NOTES FOR INSTRUCTORS IN

BATTLE FIRST AID

June, 1943

(An unofficial guide for instructors for training in Battle First Aid.)

OTTAWA

EDMOND CLOUTIER

PRINTER TO THE KING'S MOST EXCELLENT MAJESTY

1943
PREFACE

These Notes for Instructors have been drawn up by A.22 R.C.A.M.C. T.C. with a view to teaching Battle First Aid in as practical a manner as possible, taking into consideration the materials that will be available and the conditions under which First Aid will have to be applied in battle.

It will be noted that copy of Basic Training Centre Standard Syllabus in Battle First Aid is inserted in front of these notes, also that all references in lessons are made to this syllabus. These references to B.T.Cs. are made for the reason that during this phase of the soldiers' training this First Aid Syllabus is covered in its entirety, and further First Aid training during subsequent phases is devoted to recapitulation of this syllabus as given at Basic Training Centres.

It will NOT be considered therefore that these notes are applicable only to Basic Training Centres, but should form a very useful unofficial guide to instructors in First Aid in all Training Centres and Units.

[Signature]

MDHQ
10 Jun 43

Colonel,
Director of Military Training
BASIC TRAINING CENTRES
Standard Syllabus of First Aid

Subject: BATTLE FIRST AID
Code Letters: “FA”

Object of the Course: To teach a soldier to give First Aid to himself and to a comrade if he is injured in battle.

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ADVICE TO INSTRUCTORS

1. These notes cover the twenty periods allotted to First Aid in the Basic Training Centre Syllabus. The material to be covered is outlined in some detail; it should be followed closely but not slavishly. For example, in the lesson where the soldier is fixing his own broken arm, it is left to the ingenuity of the instructor to give a gas alarm when the arm is splinted; on the other hand, he must not introduce the classification of fractures into simple and compound.

2. The lessons consist of almost all practical teaching. First Aid is practical. Most soldiers already know enough about injuries that there is no need to lecture formally on them. Introduce the special knowledge they need into the practical periods while detailing the care of specific casualties; for example, in dealing with a casualty with a chest wound, bring out that he must be propped up.

First Aid is just common sense. Teach it as that. “What is the common sense thing to do for this man with the chest injury?” Everybody knows that if you are having trouble breathing you get along better sitting up. Teach First Aid this way to give the soldier confidence in his ability: he will realize that he still needs a great deal of practice in handling injured soldiers.

Keep your classes busy fixing injured soldiers. There is a deplorable tendency to talk too much. The way they learn, and what they like doing, is doing things themselves. Cut your talking and demonstrating to the bare essentials.

Have your classes realize that they are fixing up an injured man, not just an injury. There is a lot more to the care of a soldier with a broken leg than just putting on a splint.

3. Repeat constantly the things that need emphasis. While your class is putting on the First Field Dressing there is time to go over again the care in handling it—germs on the fingers and breath, bleeding is stopped by direct pressure so put the dressing on firmly, etc. With every casualty bring out the necessity of keeping up the general strength.

In particular re-emphasize that fighting comes first. Never let your class get the impression that if a comrade is wounded the thing to do is stop and fix him up. The soldier’s job is fighting; but often the situation will allow him to do First Aid. Emphasize the importance of doing First Aid for himself rather than expecting his comrades to stop. He should expect that with most injuries he will be able to go on fighting.

4. Maintain the interest of your classes. Have your equipment ready beforehand; keep them busy doing things themselves. Make your teaching
as realistic as possible. In detailing an injury don't say, "Flesh wound of the thigh"; tell what you actually would find; say, "When you come up to this soldier you see blood on his right trouser leg just above the knee. There is a hole in the cloth. Blood is spattered around, and there is blood oozing out of the hole and dripping onto the ground. He tells you a sniper must have got him."

5. Maintain proper discipline in your classes. Although First Aid teaching is perhaps less formal than most, keep your classes quiet and busy. Insist on proper handling of casualties. Never permit anyone to put on a dressing in a slovenly fashion, or other than next to the skin. Never let them handle a casualty roughly: gentle care saves lives.

6. Have your classes come in battle order; until they have learned how to put it together have them bring the component pieces. The only First Aid equipment the soldier has is his First Field Dressing. Whatever else he needs he has to improvise. He should be taught to make use of his web equipment, the contents of his small pack, his rifle, etc. Never use material that he will not have or may not expect to find, e.g. triangular bandages. Be certain he is proficient in using what he will have, the First Field Dressing.

7. Don't teach tricks. Have the soldier know what he wants to achieve, and give him confidence that he can do it with ingenuity and application. If you teach him a trick, he will remember that there is a trick but forget how to do it.

8. Use everyday speech. Don't use technical words; they are not only unnecessary but confusing. If you mean "pull on it" don't say "apply traction"; "broken bone" NOT "fracture"; "bleeding" NOT "haemorrhage"; "the leg hurts" NOT "there is pain in the leg". If you use ordinary words you will know what you mean yourself and the soldier will understand you.

One word to be careful with is "casualty". Don't call a man with a slight wound a casualty, or your class will think he is put out of action when he should be keeping on fighting.

Don't let questions from the class lead you into discussing medical treatment. Your job is to teach First Aid.

9. Do not use the word "shock," even though it is stressed in the film. Be prepared to explain what it means if asked, but in your teaching speak of keeping up the general strength.

The general strength of the wounded soldier must be kept up. If you let him get worn down he may die. This is the common reason why an injured person does die, whether the injury is a wound or a broken bone or a burn. His strength finally goes completely. (This state of complete physical collapse is what is meant by "shock"; the instructor should NOT use the word.)

The general strength of the injured man has to be mostly gone before you realize that he is in a serious state. This takes a couple of hours or more. Don't wait until anybody can see that the man is on the point of death before you do something about keeping up his strength. Start at once and save his life.

Think of the things that sap anyone's strength. In the injured they act more quickly. As soon as you begin to handle a casualty you must:

Stop bleeding, of course.
Put him at rest; he cannot rest unless you make him comfortable.
Handle him gently; every time you jolt or jar him you hurt him.
Wrap him up warmly. Injured people get chilled quickly. Be careful you don't let him get cold while you are getting at the wound. Get something under him as well as over him.
Give him a drink of water. Don't let him get dried out.
Overcome his fears; this is easy if you speak kindly to him. You must put his mind at ease as well as his body.
The faster he gets to the R.A.P. the better.
If you have to leave him, get him to a sheltered place and put his feet up. This improves the circulation of the blood. Don't raise them so much that he is uncomfortable.

When you talk about "shock" the soldier gets queer and confused ideas. He finds this sort of presentation sensible.

10. It should be emphasized that in the case of all small wounds on the surface and even through-and-through bullet wounds which go through soft parts only, the danger of infection is slight, and should not demand throwing the rifle down or stepping away from the machine gun or any other combatant duty in order that the casualty should give himself First Aid. The soldier should not be allowed to get the idea that he is inevitably going to die of an infection if he does not immediately put sulphanilamide on his wound, cover it with a field dressing, and hurry off to the R.A.P. to be given sulphaflaxazole tablets. Most of them are familiar with these ideas. If his wound is not such as to disable him definitely from fighting, he can go on fighting, as his duty is, without fearing that this will cost his life from infection, just because he does not put on his First Field Dressing immediately.

11. In presenting this material the emphasis is to be laid on the general principles involved rather than on the minute detail of procedure. If the principles are understood, the soldier will be capable of dealing with injuries not specifically covered in these lessons, because he will have been practised in dealing with the common injuries.
FA-1. INTRODUCTION

1. This period is to consist of showing the film "First Aid in the Field". The following are suggested remarks to introduce the film.

2. The purpose of First Aid is to enable the injured soldier to go on fighting. If he is so badly hurt that he is put out of action (a casualty) then First Aid should keep him alive and in the best possible condition until he can get medical care.

3. First Aid is important because the First Aid that you do on the battlefield for your wounded comrade is as important as anything the medical officers can do for him after he arrives in a hospital.

4. Every soldier must know First Aid. The only people near enough to look after him when he falls are his comrades.

5. First Aid is a little knowledge and a lot of common sense. The soldier needs practice in doing it to become confident in his ability to help himself and his wounded comrades.

6. The object of the film "First Aid in the Field" is to teach you the importance of learning your First Aid. In the rest of the course you will be taught how to do First Aid yourself.

Note:—The film "First Aid in the Field" is expected to be available in June, 1943.

FA-2. DEMONSTRATION: CARE OF A WOUNDED SOLDIER

Equipment: One new First Field Dressing.

(One member of the class in battle order.)

1. If the soldier's wound amounts to only a scratch he will, of course, carry on with the fight. Suppose he is so badly wounded that he cannot carry on; if you are fighting, you will not stop to fix him up. But often you will be able to take the time, and this is the way to look after him.

2. What you do for the man who is seriously injured is as important as what you do for his wound. You must do everything you can to keep up his strength. More wounded people die because their general strength has given out than from the wounds themselves.

3. The first thing you do, then, is to tell the man to take it easy: you are going to look after him. You will often find the wounded soldier restless, or struggling uselessly to help himself, or trying to drag himself away for help. Keep talking to him in a friendly way while you are fixing him up.

4. Ask him what is wrong; ask him how it happened. Find out everything that is wrong with him. A wounded soldier will tell you about only one wound even if he has other, perhaps more serious injuries. Bullets often go right through; look on the other side for the hole where it came out. With the rapid-fire machine gun and the thousands of splinters from one shell, a man is likely to be hit more than once. Therefore you must look him over yourself to find out all that is wrong with him.

(From here on demonstrate on the man from the class in battle order. Place him where he can be seen by all the class, e.g. on a table. As you speak to them, do things for him.)

5. "We come on this soldier sitting holding his right leg; there is blood trickling down his leg onto the ground. We ask him what happened, and he tells us that he was in an assault and got this deep bayonet wound in the calf of his right leg."

6. Have him lie down and tell him you are going to look after him.

7. Look him over for other wounds. Remember, he probably won't tell us where else he has been hit. If he has other wounds there will be blood and we will see the blood on his clothing. Slip your hand underneath him; if he has a wound underneath you will feel the blood or see it on your hand when you bring it out.
8. Get at the wound:
Why? So we can put on the First Field Dressing properly.
How? In actual battle it could be done quickly by slitting up the seams.
In this case it is easy to roll up (not drag) the trouser leg and roll down the sock.
What care must we take? Don't put germs in the wound by getting your fingers or breath in it. Keep your fingers out. Don't breathe on or talk over the wound. Your fingers and breath carry dangerous germs. And don't take off any more clothes than you have to: you want to keep him warm. Be gentle while you're handling him.

9. Get the First Field Dressing:
Where? From the soldier's own pocket.
Emphasize that your First Field Dressing is to be used for nothing but your own wounds. If extra ones are needed get them from the dead.

10. Demonstrate how to open it:
Read the directions.
Don't lose the safety pin or waterproof cover.
There are no germs on the First Field Dressing. Don't put germs on it. Keep your fingers and breath off the yellow pad. Handle only by the brown part.

11. Demonstrate how to apply it:
Bandage it firmly. The way to stop bleeding from wounds is to bandage the First Field Dressing firmly. This presses directly on the wound itself and stops the bleeding. This will stop the bleeding in practically every wound you will see.
Keep the bandages flat.
Cover the edges of the yellow pad.
Include the waterproof cover (opened out) under the last few winds.
Show how to pin and how to tie the ends.

12. Put the injured part at rest. He won't want to move it anyway, because it hurts. If it is an arm, put it in a sling.

13. Put him in a sheltered place. Now that you have fixed up his wound, get him out of the weather and out of enemy fire.

14. Wrap him up in his cardigan, ground sheet, etc., to make him warm. Injured people get chilled off quickly, partly because they are lying quietly.

15. Make him comfortable so he can rest. Put something under his head for a pillow. Be sure he isn't lying on his bayonet scabbard. Loosen the neck of his blouse. Ask him if he is comfortable. You must make him warm and comfortable or he won't lie quietly and save his strength.

16. You must make him comfortable in mind as well. If he is worried he will be tossing about. What is he worried about? Mainly about being left in the danger area. Tell him you are marking the place where he is so the stretcher bearers will find him and take him out.

17. Mark the spot by sticking his rifle into the ground, or by a stick with a rag on it.

Note:-The film “First Aid in the Field” says that all wounded men suffer from shock sooner or later. This, of course, refers only to those men who are badly wounded.
FA-3. PRACTICAL: CARE OF A WOUNDED SOLDIER

EQUIPMENT: New First Field Dressings (if available, otherwise practice type).
One new Shell Dressing.

1. Have all the class sit on the ground in a semi-circle around the instructor. One new First Field Dressing between each two.

Each man has a bayonet slash on the front of the right shin. There is blood oozing from the wound.

In battle, with a little wound like this you wouldn't stop fighting. You would wait until there was a lull before you fixed yourself up.

Get at the wound. Roll up the trouser leg; don't drag it over the wound. Don't get your fingers or breath into the wound.

Open the First Field Dressing—
Open the cloth cover and each man take half.
Rip off the safety pin; stick it on the front of your blouse or put it in your pocket.
Open the waterproof cover as the directions printed on it indicate and shell out the dressing.
Take off the wax paper. Touch only the brown part. You are going to put the yellow part directly on the wound; don't get germs on it. Hold it so the yellow part is turned away from you.

NOTE.—If only practice First Field Dressings are available, demonstrate this part with the new one used in FA-2.

Put on the First Field Dressing—
Open out the yellow pad and put it directly on top of the wound.
Bandage it on with the brown bandages.
Bandage it firmly. That is how you stop the bleeding.
Keep the bandages out flat or they will curl up into strings.
Cover the edges of the yellow pad to keep dirt from getting under it.
Include the waterproof cover, opened out, under the last few winds.
Pin the ends.

Replace the clothing.
With this wound you are not put out of action; you would now continue with your job: fighting.

2. Now show the class how to roll up the dressings for practice use.
Roll the brown bandages on a pencil; fold the dressing as it was originally; place the waterproof cover around it, and pin the edges with the safety pin. The class should be taught to do this automatically whenever they take off a dressing, and the practice dressings are then always ready for use.

3. Have the class divide into pairs. One of the pair sits and is the injured man.

This man was gashed by a shell splinter on the back of the right shoulder. There is blood dripping away from the wound.
Get the man in a position in which he can rest.
Look for further injuries.
Get at the wound. In battle you would probably slit the clothing. In practice you must remove the clothes. Take the sleeve off the uninjured side first. Keep him warm by putting his blouse and cardigan over him.
Put on the First Field Dressing—
Where do you get it?
What care do you have to take?

To make the dressing stay in place you will need extra bandages. Use the man's towel, socks tied together, etc. The dressing must be held on firmly. The instructor should check carefully to be sure that the dressings are held in place firmly.

Replace his clothing, putting on the sleeve on the injured side first. The wound is a deep gash; his arm is useless anyway, so leave his arm inside his blouse and button the blouse over it. This makes a good sling.

Give him a drink of water.
This man is able to walk. Hang his equipment on his good shoulder and tell him how to get to medical aid.

4. Demonstrate use of Shell Dressing.

The Shell Dressing is a larger dressing than the First Field Dressing, but it looks much the same. It is used for large wounds that can't be covered by the First Field Dressing, although large wounds can often be covered by two First Field Dressings side by side. The Shell Dressing is done up in the same way as the First Field Dressing; it is opened and put on in the same way. It is found in First Aid outfits, and is also distributed by the Regimental Medical Officer; sometimes they are given out to individual soldiers; usually they are put out in haversacks with a red cross on them, that hold a dozen.

5. Select a man from the class. Have him lie down.

When we come on this man we see blood spattered on the right side of his chest. He tells us that it hurts every time he breathes. He says a shell burst near him.

He is already resting.
Look for other injuries. How?

Have one man from the class kneel behind and support the head and shoulders of the casualty.

Take off the web equipment, carefully.

Get at the wound. Don't expose the man more than you have to.

There is no need to take off any clothing; undo and roll up his blouse, shirt, etc.

Show how to open and put on the Shell Dressing. Same care and procedure as for the First Field Dressing.

Replace the clothing. You must keep him warm.

Put him in a sheltered place.

Make him comfortable.

If you have ever seen anyone who was having trouble breathing, you know they get along better if they are sitting; so prop this man up, e.g. against a tree, and he will breathe more easily.

Wrap him up in his cardigan, gas cape, ground sheet, etc. Don't forget to have something underneath him.

Give him a drink of water. He wants and needs something to drink to keep up his strength. Leave his water bottle handy, so he can take frequent sips.

Leave his respirator handy; have the facepiece out so he can get immediate protection.

Make him easy in his mind; he is most worried about how he will be got out. Tell him you are marking the spot so the stretcher bearers will find him.

Mark the spot by fixing the bayonet and sticking his rifle in the ground.

FA-4. PRACTICAL: CONTROL OF BLEEDING

Equipment: Sticks about one foot long.

Introductory talk:

1. The way to stop bleeding from wounds is to put the First Field Dressing on firmly.

2. All wounds bleed. A small amount of blood will make a big mess, which will frighten you unless you expect it. The usual appearance is blood spattered on the clothing for a foot or so around the wound; streaks of clotted blood leading away from the wound, and blood oozing and dripping out of the wound. Bleeding of this sort is what to expect in any wound; do not be frightened by it.

3. Bleeding of this sort—that is, with the vast majority of wounds—is stopped by direct pressure on the wound itself. Bandage the First Field Dressing on firmly. This presses directly on the wound, and this stops the bleeding. You can add to this pressure by pressing on top of the First Field Dressing with your hand; another way is to use other bandages (socks, towel, etc.) on top of the dressing to add to the pressure.

4. Very rarely you may see blood gushing or spurting out of a wound. If it is a small spurt, as from a small tube in the wrist, ankle or foot, the First Field Dressing and pressure will usually stop it. But if it is higher up in the arm or leg, the cut tube is usually larger. You must do more in this case, and you must act immediately or the man will bleed to death before your eyes. You stop the bleeding by squeezing the tube that is carrying the blood to the wound. You pinch the tube against the bone.

NOTE.—Most of the time in this period is devoted to the tourniquet. This is because it can save lives only if it is put on properly. Use it only if you have it, which is rarely. Be sure it is put on properly. Keep reminding the class that the way to stop bleeding from almost all wounds is to put the First Field Dressing on firmly.

5. Demonstrate:

Pick a man from the class.

This man has been slashed across the front of the right elbow, and the blood is spurting out of the wound.

Squeeze his arm like this (inside upper arm) to stop the spurting immediately.

If this were a real wound, you would see that the bleeding had stopped.

How can we tell while we are practising? By feeling the pulse stop. In a real casualty, however, watch the bleeding stop.

Show where to feel the pulse. (On the thumb side of the wrist. A common error is to press too hard; place the finger tips lightly on the spot.)
Having members of the class doing it, show how easily the pulse is shut off by pressing on the inside of the upper arm.

6. Practice:
Class in pairs.
Make sure each member of the class is convinced that he can stop bleeding in the arm instantly.

7. Demonstrate (Fig. 1):
Pick the same man as before. He has the same injury.
Have one of the class stop the bleeding instantly by pressing on the inside of the upper arm.
While the bleeding is controlled in this way, put on a tourniquet—Anywhere between the shoulder and the elbow.
No pad is necessary under the tourniquet.
Put it on over the clothing.
Use a piece of web, handkerchief, etc. (A pull-through hurts more than something broad; it should never be used unless there is absolutely nothing better to be had. Of course, it is better than nothing. The bandage of a First Field Dressing is not strong enough and should not be practised.)

You MUST be sure—
That it is twisted tight enough to stop the bleeding.
That the stick is fastened securely so it cannot possibly untwist and come loose.
Mark “T” on his forehead, and the time.
If nothing else is available, use blood to mark him. If possible attach a card to him with the “T” and time written on it.
Loosen the tourniquet every 15 minutes. The casualty may have to do this himself; leave it so he can. Loosen it for only a few seconds. If the bleeding has stopped, leave it loose; if the dressing is soaked immediately with fresh blood and it pours out around the dressing, tighten the tourniquet again.

8. Practice:
Class in threes.
Have them put tourniquets on the arm, using straps from the web equipment, while holding the bleeding stopped with hand pressure.
Be sure that the tourniquet is tight enough to stop bleeding (the pulse will be cut off).
That it cannot possibly work loose and untwist.
That the casualty will be able to loosen it himself every 15 minutes.
That “T” is marked on forehead.

9. Demonstrate:
Take a man from the class. Have him take off a shoe and sock and lie on his back.
As in previous demonstration, show where to feel the pulse at the ankle (the middle of the top of the foot).
Show where and how to use hand pressure to cut off the pulse. (Across the front of the thigh, level with the lower end of the fly, out at the pressed crease in the trousers. Use the hand doubled up into a fist.)
Show the tourniquet applied while holding with hand pressure; anywhere between the hip and the knee.
Emphasize the same precautions—
Tight enough.
Can’t come loose.
Loosen every 15 minutes.
“T” on forehead.

10. If you have time, practise this as for the arm. If the time is short, the instructor should feel the pulse in the foot while each member of the class in turn shuts off the pulse by hand pressure. Then demonstrate putting on the tourniquet.

11. Recapitulation talk:
The tourniquet is dangerous. It cuts off all the blood to the arm or leg. If the blood is cut off long enough the arm or leg will die. (NOTE.—There is no need to use the word “gangrene.”) Do not put it on unless you have to; you have to if the blood is spurting from the wound. Then stop the bleeding instantly with your hand while you put on the tourniquet.
You will practically never have to use a tourniquet. The way to stop bleeding from wounds is to put the First Field Dressing on firmly.

12. There is no need to use the word “artery” or speak of “arterial bleeding”. Arteries are commonly cut, yet the spurting type of bleeding for which a tourniquet is necessary is very rare. When blood is not spurting, the bleeding is stopped by firm pressure, no matter where it comes from.

13. The film “First Aid in the Field” shows four pressure points. The ones in the neck are difficult to learn and will NOT be taught in Training Centres.

14. The film shows “a piece of wood or stone or any hard object being used in a tourniquet”. This should not be taught for three reasons:
It is unnecessary; bleeding can be stopped just as well without it.
If the object has sharp edges, it may cause further damage to the limb.
Precious time may be wasted looking for such an object.
FA-5. PRACTICAL: WOUNDS THAT NEED SPECIAL CARE

Equipment: Practice First Field Dressings.

1. Divide the class in threes. Each in turn is the injured man to be fixed up by the other two.

2. One of the three lies on the ground.
When you come on this soldier you find he is knocked out (unconscious). He does not answer when you speak to him. What sort of an injury do you expect to find? Something has hit his head; this is the common reason for unconsciousness in battle. You look on this man's head and you find a bullet wound on the left side of his head, two inches above the left ear. Blood is trickling from the wound onto the ground.
Are you going to try to bring him to? No. You can't rouse him and you will only injure him by trying.
Other injuries? Handle an unconscious man gently; he can't shout when you hurt him.
Put on his First Field Dressing. Care? You will almost certainly need extra bandages to make the dressing stay in place firmly; use his towel, socks tied together, etc. (Don't teach any trick for making it stay on by special winding.)
Take off his web equipment; loosen his blouse at the neck. Place him on his belly with his arm as a pillow. His face must be turned downwards; when he is unconscious his tongue may slip back into his throat and choke him, or he may vomit and choke himself if he is on his back. With his face turned down, his breathing will be clear, but make sure his mouth is free so he isn't smothered.
Wrap him warmly with his ground sheet, cardigan, etc. NOTHING to drink; he is unconscious and can't swallow and would choke.
Take out his respirator facepiece.
Mark the spot.

3. (Discuss; there is not enough time for practice.) Another man you would put so he was lying with his face turned down is one who is bleeding into his mouth. Anyone with a face wound, put him so the blood will run out of his mouth rather than into his throat where it may choke him.

4. Second one of the three lies on the ground.
You find this soldier lying on his side. He says it hurts every time he breathes. He is coughing up small amounts of reddish foam. There is blood oozing from a wound on the right side of his chest where he was hit by a bomb fragment.
Look for further injuries.
One man kneels and supports the head and shoulders of the casualty. This makes it easier to fix him up.
Remove his web equipment quickly but gently to make him comfortable so he can rest, and also so you can get at the wound.
Expose the wound gently. No unnecessary exposure.
Put on the First Field Dressing. Be sure it is held on firmly; extra bandages will be needed for this (socks, towel, etc.). If it is put on snugly it will help him to breathe without hurting. It must be snug also because of the danger of air getting in through the hole in the chest.
Replace the clothing.
Put the casualty at rest in the position in which he can breathe most comfortably; this is propped up.
Wrap his cardigan and ground sheet around him so he will be warm.
Give him a drink of water; leave his water bottle handy.
Get out his respirator facepiece.
Mark the spot.
Tell him he will be picked up soon.

5. Third one of each three lies down.
You find this soldier lying on the ground. He says he was hit in the belly and that it hurts a lot. You find a small bullet wound on the left side of the belly with blood oozing from the wound.
Look him over for other injuries. Don't take his word for it. You find that the bullet went right through and there is another wound behind.
Get at the wound. It is easier to fix this man up if he is supported by one of the men supporting his head and shoulders, kneeling behind him.
Put a First Field Dressing on each wound. Get the yellow pads on the wounds before you start bandaging, and don't get your fingers in the wounds. Bandage firmly.
Replace the clothing.
Put him at rest in a comfortable position in a sheltered place. Take off his equipment, loosen tight clothing, use his pack for a pillow.
Wrap him up well.
FA-5. PRACTICAL: WOUNDS THAT NEED SPECIAL CARE

Equipment: Practice First Field Dressings.

1. Divide the class in threes. Each in turn is the injured man to be fixed up by the other two.

2. One of the three lies on the ground.

When you come on this soldier you find he is knocked out (unconscious). He does not answer when you speak to him. What sort of an injury do you expect to find? Something has hit his head; this is the common reason for unconsciousness in battle. You look on this man's head and you find a bullet wound on the left side of his head, two inches above the left ear. Blood is trickling from the wound onto the ground.

Are you going to try to bring him to? No. You can't rouse him and you will only injure him by trying.

Other injuries? Handle an unconscious man gently; he can't shout when you hurt him.

Put on his First Field Dressing. Care? You will almost certainly need extra bandages to make the dressing stay in place firmly; use his towel, socks tied together, etc. (Don't teach any trick for making it stay on by special winding.)

Take off his web equipment; loosen his blouse at the neck.

Place him on his belly with his arm as a pillow. His face must be turned downwards; when he is unconscious his tongue may slip back into his throat and choke him, or he may vomit and choke himself if he is on his back. With his face turned down, his breathing will be clear, but make sure his mouth is free so he isn't smothered.

Wrap him warmly with his ground sheet, cardigan, etc. NOTHING to drink; he is unconscious and can't swallow and would choke.

Take out his respirator facepiece.

Mark the spot.

3. (Discuss; there is not enough time for practice.) Another man you would put so he was lying with his face turned down is one who is bleeding into his mouth. Anyone with a face wound, put him so the blood will run out of his mouth rather than into his throat where it may choke him.

4. Second one of the three lies on the ground.

You find this soldier lying on his side. He says it hurts every time he breathes. He is coughing up small amounts of reddish foam. There is blood oozing from a wound on the right side of his chest where he was hit by a bomb fragment.

Look for further injuries.

One man kneels and supports the head and shoulders of the casualty. This makes it easier to fix him up.

Remove his web equipment quickly but gently to make him comfortable so he can rest, and also so you can get at the wound.

Expose the wound gently. No unnecessary exposure.

Put on the First Field Dressing. Be sure it is held on firmly; extra bandages will be needed for this (socks, towel, etc.). If it is put on snugly it will help him to breathe without hurting. It must be snug also because of the danger of air getting in through the hole in the chest.

Replace the clothing.

Put the casualty at rest in the position in which he can breathe most comfortably; this is propped up.

Wrap his cardigan and ground sheet around him so he will be warm.

Give him a drink of water; leave his water bottle handy.

Get out his respirator facepiece.

Mark the spot.

Tell him he will be picked up soon.

5. Third one of each three lies down.

You find this soldier lying on the ground. He says he was hit in the belly and that it hurts a lot. You find a small bullet wound on the left side of the belly with blood oozing from the wound.

Look him over for other injuries. Don't take his word for it. You find that the bullet went right through and there is another wound behind.

Get at the wound. It is easier to fix this man up if he is supported by one of the men supporting his head and shoulders, kneading behind him.

Put a First Field Dressing on each wound. Get the yellow pads on the wounds before you start bandaging, and don't get your fingers in the wounds. Bandage firmly.

Replace the clothing.

Put him at rest in a comfortable position in a sheltered place. Take off his equipment, loosen tight clothing, use his pack for a pillow.

Wrap him up well.
NOTHING to drink. There is probably a hole in his guts, and it would be dangerous to give him a drink of water. But he is thirsty and will ask for water. The thing to do is to wet a cloth and moisten his lips with it; this will make him more comfortable.

Mark the spot.

Take out his respirator facepiece.

Tell him the stretcher bearers will find him soon.

6. Discuss:

A shell splinter sticking in the eye—
Do NOT try to pull it out no matter how easy it looks.
Cover with a First Field Dressing and bandage loosely.
(The same is true of a splinter sticking out of any wound. Don’t pull it out. Put the dressing over it.)

An arm or a leg blown off—
Often the bleeding is no more than from an ordinary wound.
If the blood is pouring or spurting out of the stump, then you have to put on a tourniquet.
Put First Field Dressings or Shell Dressings over the stump and bandage firmly.
In other words, treat it as you would any other wound.

1. How bones get broken in battle:
By bullets, shell fragments, etc. This is the common way bones are broken in war. The flying metal hits the bone directly or passes near it, breaking it by its shattering action. The bullet makes a wound as well as breaking the bone; you must cover the wound with the First Field Dressing.

By vehicle accidents, falls, falling buildings, etc. This is much less common in war. There is usually no wound, and so no need to put on the First Field Dressing.

Out of every three war wounds, two have a broken bone with them.
Every time you see a wound, suspect a broken bone.
The arm or leg is often bent where it should be straight. If the bone is broken, it can bend at the break. If you see a man whose thigh is bent, then you know it must be broken. (This is what is meant by “unnatural position” and “deformity”; the instructor should not use these terms.)

Usually it hurts, particularly when it is moved. But especially in battle it may not hurt very much, and the man may be able to move the broken arm or leg.

When in doubt treat as a broken bone.

3. How to handle a casualty with a broken bone:
Steady the broken limb with a steady, even pull. Start the pull at once and keep it up steadily until the dressing is on the wound and the splints applied. Pulling is for the purpose of holding the limb steady while handling it. Remember that every movement of the broken limb hurts and runs down the general strength; steady it with a firm, even pull; don’t jerk it. Occasionally you may have to work alone; then the broken limb cannot be held steady by pulling. If bent, simply place it so it is approximately straight, and by great care avoid moving it while putting on the dressing and splints.
Get at the wound while one man is still pulling. Do it gently and carefully. Every time you jar the broken limb it hurts. Also be careful while putting on the First Field Dressing.

Make the limb so that it cannot move—
Get a splint; use his rifle, or a stick, etc. Remember that his body and the other leg make good splints.
Bind the broken limb to the splint with straps from the web equipment, rifle sling, anklets, socks, etc.
Bind them firmly enough that the limb is held so that it cannot move.
Use padding to cushion the splint where it is rubbing against bones, e.g., at the hip. Use gloves, socks, grass, etc. Ask the man where the splint is uncomfortable.
Check to be sure the straps aren't too tight and cut off the circulation. If he can't wriggle his toes or if his foot hurts greatly, the straps must be loosened. The same is true in the arm, but as well you will see that the fingers are blue and cold. Because of swelling this should be checked every hour or so, if you are staying with the casualty.
If possible move him to a sheltered place, but get the broken limb held steady by a splint before you move him.
Keep up his general strength; wrap him up warmly; make him comfortable in body and mind so he can rest; give him a drink of water; etc.

FA-7-8. PRACTICAL: CARE OF SOLDIER WITH BROKEN LEG—RIFLE SPLINT

Equipment: Practice First Field Dressing.

1. Demonstration (Figs. 2 and 3 show the rifle splint applied to a broken thigh):

Take a man from the class; have him lie down.
This soldier was hit on the right shin by a machine-gun bullet. His leg is bent where the bullet hit it. Blood is trickling down his trouser leg.
What is wrong with him? The bone is certainly broken. Has he been hit anywhere else? We have to look.
Steady the broken leg by pulling firmly and evenly on the right foot. Get a helper to do this. You must keep up the steady, even pull until you have the leg fixed so that it cannot move.
Get at the wound—gently and quickly.
Put on the First Field Dressing.
Replace the clothing.
Take off his web equipment and anklets. You are going to use them.
Make him comfortable as you work—pillow, etc.
Take the bolt out of his rifle and put it in his pocket. Take the sling off the rifle. The bayonet and scabbard, if he has them, should be left on the rifle.
Use one of his shoulder braces to tie the muzzle of the rifle securely to the outer side of his ankle. Put in a bit of padding, e.g., a glove. The rifle is put magazine up. Keep the strap on the boot.
Pass the other shoulder brace between his thighs; bring it up snugly against the crotch, being sure his privates are on the other side and won't be caught; put the end of the brace through the swivel opposite ways you will find the tying easier (Fig. 2). Pull this brace tight so that it pulls firmly on the foot; to do this have the casualty push on the butt of the rifle while the man who is putting on the splint pulls on the ends of the braces. (Note.—If the muzzle is not tied securely to the ankle it will slip through and must be readjusted.) Tie securely. The advantage of this splint is that it pulls on the leg and holds it steady partly this way. Be sure that it is pulling.
Use the straps off his small pack, etc., to fasten the leg to the rifle above and below the break in the bone. Put them on firmly, and get the other straps also tied firmly or they will not hold the leg steady.

Use the web anklets buckled together to fasten the two legs together to the rifle around the knees wherever they fit snugly. Tie the rifle sling around the ankles. Tie the feet together securely with the pull-through or socks. Put in padding wherever he finds the splint sticking into him; he will want padding at the hip.

Put the web belt around his waist and use it to hold the butt of the rifle to his body. If you put it around his waist you will not need to enlarge it.

Ask him to wriggle his toes; ask him if it is comfortable; if necessary readjust straps, put in padding, etc.

You now have the leg held so that it cannot move; if it can’t move it won’t hurt him. If it is hurting, his general strength will become run down. Be sure the leg cannot move.

Move him to a sheltered place.

Make him comfortable; use his pack for a pillow, etc.

Wrap him up in his cardigan, ground sheet, etc., to make him warm.

Give him a drink of water.

Get his respirator facepiece out.

Mark the spot and tell him he will be picked up soon.

2. Practice:

Divide the class in threes; each to be the injured man in turn to be fixed up by the other two.

3. The first man lies down.

Detail the same injury as in the demonstration.

Have the class look after this man as the instructor details the steps.

4. Second man lies down.

This soldier is found lying on the ground with blood oozing from a wound on the front of his left thigh where he was hit by a machine-gun bullet. The thigh is bent at this spot, halfway between the hip and the knee.

The bone is broken certainly. Any other injuries?

Steady the leg by pulling on it.

Get at the wound. Care?

Put on his First Field Dressing. Care?

Take off web and anklets.

Put on the rifle splint as above; fasten the leg to the splint above and below the break in the thigh. Because most men dress on the left, with this practice don’t forget to be sure that the privates are not being caught by the strap in the crotch. Get them out of the way so that the strap comes firmly up against the bone in the crotch.

Shelter.

Make him comfortable.

Make him warm.

Drink of water.

Respirator.

Mark the spot and reassure him.

5. Third man of each three lies down.

This man was run into by a lorry which hit him on the left leg. When you come on him you find his left leg is bent halfway between the knee and the ankle.

The bone is certainly broken.

Steady the leg by pulling on it. No need to put on the First Field Dressing because there is no wound.

Put on the splint and take care to keep up the general strength as above.
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FA-9-10. CARE OF A SOLDIER WITH A BROKEN ARM

Equipment: Practice First Field Dressings.

Sticks two to three feet long.

1. Practice:

   Divide the class in threes, each of the three to be the injured man in turn.

2. First man sits down (Figs. 4 and 5).

   This soldier is sitting on the ground holding his right arm with his left hand. He was hit by a sniper’s bullet halfway between the shoulder and the elbow on the right arm. There is blood trickling down the arm and dripping slowly onto the ground.

   Find out all that is wrong with him. The right arm is almost certainly broken. Has he other injuries?

   Start at once to steady the limb by pulling firmly on the elbow; it is easier and better to keep the arm bent at the elbow while you pull; and pull the arm in its usual position close to the side. Don’t let up the steady pull until the arm is held so that it cannot move.

   Get at the wound by removing the clothing gently. In battle you might slit along the seams. In practice take off the blouse, etc., taking off the uninjured side first.

   Cover the wound quickly with the First Field Dressing; bandage gently and firmly.

   Bind the upper arm firmly to the chest (the splint), using his cardigan, strips from his web equipment, strips of shirt, etc.

   Replace the blouse, but leave the broken arm inside; button the blouse over it; it makes an excellent sling and helps to hold the arm steady.

   Give him a drink of water.

   He is probably well enough to walk. Hang his equipment on his good arm and send back to medical help. Be sure he is able to get on his respirator facepiece; leave his respirator where he can get it quickly.

3. Second man of the three is injured (Fig. 6).

   You find this soldier leaning against a tree, carefully supporting his left forearm with his right hand. You find he has a jagged wound a couple of inches long in the middle of his left forearm. Blood is spattered over his clothing and is dripping to the ground. He says he was hit by a shell splinter.

   Have him sit down and rest.

Find out all that is wrong with him. The arm is almost certainly broken, so steady it by pulling. Pull by grasping the hand and the elbow, and keep the elbow bent. Has he other wounds?

Get at the wound.

Put on the First Field Dressing; tie the ends and save the safety pin. Roll the sleeve back down again.

Get a splint at least long enough to go from the elbow to the ends of the fingers: a stick, a branch, a folded newspaper, etc. Place the splint so that it is inside the elbow and against the palm of the hand.

Bind the broken forearm to the splint with a handkerchief, socks, pieces of web equipment, etc. Pad if necessary. Be sure that the hand and fingers are held to the splint.

Pin the cuff of the sleeve to the front of the blouse (a good sling); or you might put the hand inside the front of the blouse.

Give him a drink of water.

Hang his equipment on the sound arm. Reassure and send him to the R.A.P.

4. Third man sits down.

   This soldier is found sitting on the ground. He has been shot through the left shoulder. Blood is oozing from the wound in front and the wound behind and trickling down his sleeve.

   Detail the same care as for the first.
FA-11. DEMONSTRATION: BURNS

Equipment: Practice First Field Dressings.
       Practice Shell Dressings.
       Gauze and bandages as found in First Aid outfits.

1. Burns are caused by fires in barracks, bivouacs, tanks, vehicles, etc. Actually most fires and burns are the result of carelessness. The more obvious instances of carelessness might be pointed out.

2. To handle a burned soldier. (This can be presented much more clearly and definitely as a demonstration than as a lecture. Get a condemned battle dress blouse and burn it down the front. Have one of the class put this on and demonstrate on him the things to do.)

   What you do for the man is as important as what you do for his burn. He will die if you don’t keep up his general strength. Have him lie down and rest.

   Cover the burn on the face and hands and cover exposed parts with dressings that are free of germs: First Field Dressings, Shell Dressings or gauze from a First Aid outfit. (Demonstrate these.) On the body, if charred clothing is stuck to the burn, do not remove it. Remove only unstuck clothing so that you can put on the dressing over the whole area of the burn and, if possible, outside it.

   Keep up his general strength—
   Wrap him up to keep him warm.
   Make him comfortable; you must handle him very gently.
   Speak kindly to him while you are with him.
   Give him frequent sips of water.

   If the situation is such that you can, take the man quickly (but handle him gently) to the R.A.P. Otherwise mark the spot.

3. Do NOT put on:
   Tannafax; Triofax; boiled tea; wet dressings; iodine.

4. Gauze and bandages are in the First Aid outfits of tanks, armoured cars, A.A. guns, etc. Obviously, First Aid outfits cannot be carried by every soldier as well as all his other equipment. This is why he has his First Field Dressing.

5. The film “First Aid in the Field” says, “Keep the dressing wet”. This should not be taught, for two reasons:
   A burn with a wet dressing is more likely to get germs on it than if it is kept dry.
   A water bottle only holds 40 oz. of water, and the burned man will need it to drink.

FA-12. PRACTICAL: ARTIFICIAL RESPIRATION

Equipment: None.

Preliminary talk:

1. Sometimes a man stops breathing before he dies. This happens in drowning, in carbon monoxide poisoning and in electric shock. The man is still alive; he is not breathing; you must make him breathe if you are going to keep him alive.

2. Be careful you don’t kill yourself trying to rescue these people. You probably know the ways to rescue a drowning man.

3. With carbon monoxide poisoning, remember your service respirator does not give you protection. If you take a dozen quick, deep breaths you will be able to hold your breath longer. You do not see or smell the gas; but you suspect it with gasoline motors running in a closed garage, machine guns firing for a long time out of an unventilated pill box, near a burst gas main, etc.

4. With electric shock, insulate yourself to get the man off the “live wire”. If you use sticks or boards, be sure they are dry.

5. If the man has stopped breathing you must:
   Start artificial respiration immediately. Don’t waste time trying to get the water out of a drowning man.
   Keep it up without stopping. Men have been revived after eight hours’ artificial respiration.

6. Demonstration (Fig. 7):
   Take a man from the class and have him lie on the ground.
   This man has just been taken from the water where he was drowning. He is still alive but not breathing.
   Start immediately; put him down on the first spot at the water’s edge.
   Take a moment to get off his equipment and get him in the proper position; this is on his belly, one arm for a pillow, with his face turned to one side, and the other arm over his head. Be gentle when you are rolling him over.
   Position of operator: straddle the casualty, kneeling, your knees about the lower end of the buttocks, your elbows straight, and your hands on his lower ribs; this is about where the belt of his blouse is.

   Count one per second; count “one thousand, two thousand, and so on.” Continue counting out loud to keep the rhythm constant.
   1—Lean forward to press the air out of his lungs; it doesn’t take all your weight, only about sixty pounds pressure. Keep your elbows straight.
2—Hold.
3—Back on your heels; keep your hands in position.
4—Rest.
5—Rest.
1—Forward again.
   And so on.
Continue until the casualty starts to breathe.
If you have help, have your assistant make the casualty warm and, if possible, get medical aid.
When your casualty starts to breathe, watch him closely in case he stops again. Keep him lying down; he is a stretcher case.

7. Practice:
Class in pairs. One lies down. Have them lie down in a row to make it easier to check them.
This man has just been taken from the water, where he was drowning.
Get the man in the proper position, taking only a moment to get off the equipment. Be gentle in handling him.
Straddle.
Hands in position on the lower ribs.
(Instructor now checks the position.)
Count “one thousand, two thousand, etc.,” one per second; have the class count out loud from the start while they carry out the movements as shown.
Instructor checks—
   Not too much pressure.
   Elbows straight.
   Leave hands in position throughout.
   Have them continue for five minutes.
Have each operator ask the man he was working on—
   Was he making him breathe?
   Was he using too much pressure?
Have the pairs change operator and casualty and repeat.
Change in this way two more times so that each man practises twice.

8. If you have time at the end, demonstrate how easy it is to take over from a man giving artificial respiration. It is done by stages, each stage being done in the three seconds when the operator is resting (3, 4 and 5). The operator moves his knees so he is kneeling at one side; the assistant, kneeling on the other side, puts his hands on the operator's for one breath; the operator removes his hands and moves out of the way; the assistant moves his knee over to straddle and carries on. There is nothing at all difficult about this, and the casualty should not lose a breath.

FA-13. PRACTICAL: CARE OF A SOLDIER WITH A BROKEN LEG—LONG LEG SPLINT

Equipment: Practice First Field Dressings.
Poles or boards five feet long.

1. Divide the class in threes; each is injured man in turn.
2. First man lies down (Fig. 8).

There is blood on this man’s leg just below the knee. He says he was in open ground and was hit by a machine-gun bullet.
The leg is almost certainly broken. Look for further injuries.
Steady the leg with a steady pull. Keep up the pull until the splinting is completed. Chat with him kindly.
Get at the wound. Care?
Put on the First Field Dressing. Care?
Replace the clothing.
Get a long pole for a splint, at least long enough to reach from the foot to the waist. You may not always have a rifle to use as the splint for a broken leg. You can make a satisfactory splint out of a board, or a rail, etc.
Take off his web equipment; you will use it for straps.
Tie the splint to the ankle, using a shoulder brace.
Put in padding if the splint is uneven; you will need it at the ankles and hip; use gloves, socks, grass, etc.
Fasten the web belt around the waist.
With the shoulder straps from the small pack, tie the broken leg to the splint on each side of the break.
Tie the two legs together to the splint: at the feet, at the ankles and near the knees; use the anklets buckled together, the other shoulder brace, cardigan, socks tied together, etc.
Be sure the broken leg is held steady so that it cannot move. The straps must be tied snugly.
Move him to a sheltered place.
Make him warm and comfortable.
Give him a drink of water.
Get out his respirator facepiece.
Mark the spot and tell him so.
3. Second man lies down.
This man was coming down by parachute and landed, hitting his right leg on the ground. You find him lying on the ground. His right thigh is bent about six inches above the knee, and he says it hurts terribly. Look after this man in the same manner, except that as there is no wound the First Field Dressing is not needed.

4. Third man lies down.
Detail the same injury and care as for the first.

FA-14. PRACTICAL: CARRYING A WOUNDED SOLDIER

Equipment: Poles eight feet long.
Capes, anti-gas, or ground sheets.

1. Preliminary talk:
Everyone should be able to carry injured men without having to have a stretcher. The important thing to remember, no matter how you are carrying, is to handle the casualty gently; every time you jar or jolt him you cause him pain and his general strength goes down.

2. Demonstrate and have the class practise—
   Human crutch.
   Pickaback.
   Fireman’s lift.
   Four-handed seat.
   Three-handed seat.
   Fireman’s drag: useful if you have to get the man out under fire and the cover is poor.

Demonstrate how to drag a man by undoing the front ends of his shoulder braces; the man who is dragging crawls ahead and drags the man by pulling on the shoulder braces. This is another method to use if the cover is low.

3. Improvised stretchers:
   Table, door, shutter from window, etc.
   Two poles and two ground sheets. Lay the ground sheets flat, with the edges overlapping. Place a pole across the middle (Fig. 9a) and fold over the pole. Place the second pole across the middle of this (Fig. 9b) and fold back (Fig. 9c). The ends of the stretcher should be strengthened by fastening a safety pin or piece of string through the eyelets.

   Two poles and two gas capes. Open out the capes and place them so that the bottom edges overlap; keep the sleeves spread out. Place a pole across the middle (Fig. 9d) and fold. Place a pole across this (Fig. 9e) and fold back (Fig. 9f).

   Two poles and three battle dress blouses, or one battle dress blouse and one greatcoat.
PRACTICAL: SOLDIER GIVING FIRST AID TO HIMSELF

Equipment: Practice First Field Dressings.
Sticks two to three feet long.

Preliminary talk:
1. Under many circumstances you will have to fix yourself up, because your comrades must keep on fighting. The fight is more important than any of us. In many cases you will not stop, but carry on fighting. Don’t think just because you are hit that you automatically stop.

2. In many instances you will be able to fix yourself up perfectly well. Sometimes you will find it pretty hard, and the First Aid you give yourself won’t be as good as others could do for you. By now you know what you want to do, so do the best you can.

3. Some things you would find very hard to do. If you had a broken arm it would be agony to move it. But then you got in the army because you had guts.

4. When practising in this period, act as if you were actually hurt. We are not going to take time to practise the easy things, like putting a dressing on your leg.

5. Practice:
Each of you has been hit by a bullet four inches above the left wrist. The arm is bent at this spot. There is blood dripping from the wound. Support the arm carefully, sit down. Support the arm in your lap and get at the wound. Put on the First Field Dressing. Use a stick for a splint. Put on the splint; tie the socks, straps of web, etc., by holding one end in your teeth and working with the good hand. Fix the arm in a sling; e.g. put the hand in the front of the blouse, pin the cuff to the front of the blouse, etc. Get your respirator facepiece handy. Pick up your equipment and walk back to the R.A.P.

6. Practice:
Each of you has been gashed on the back of the right hip by a shell splinter. There is blood oozing from the wound. Get at the wound. Put on the First Field Dressing. It will be hard to make it stay firmly in place if you are going to carry on. Use extra bandages, socks, towel, pieces of shirt, etc., and be sure that it will stay in place. Replace the clothing. Drink of water. Carry on. Have the class run a stretch and then check to see if the dressings were held firmly in place.

7. Practice:
Each of you has been hit by a machine-gun bullet just below the right knee; the leg is slightly bent at this spot. The leg is certainly broken. Possibly you can’t reach to put on the First Field Dressing. If you can you would slit the trouser leg and put it on. Take the rifle with bayonet and scabbard attached.Unload, take out the bolt which you put in your pocket, and take off the sling. With the rifle held so that the magazine is up, gently shove the bayonet and scabbard along the outside of the ankle on the injured leg; push it down inside the anklet and inside the boot until it is pushing against the inside of the sole of the boot. Tie the leg to the rifle just above and just below the break in the bone; use the straps from the small pack for this. Tie the rifle sling and one shoulder brace together; put it between the thighs and bring it up against the crotch; pass the ends through the butt sling swivel as when putting the rifle splint on someone else. Get your web belt in position and now lie down. Tighten this strap so that the rifle is pulling on the leg, and tie securely. Fasten the web belt around your waist to hold the rifle to the side. Drink some water.
Now roll over and crawl to shelter, or to where you can get help, or to a road where you will be picked up.

PRACTICAL: SOLDIER GIVING FIRST AID TO HIMSELF
PRACTICAL: FIRST AID AND CHEMICAL WARFARE

Equipment: None.

Preliminary talk:

1. A soldier exposed to tear gas or nose gas can carry on. He is not out of action. He puts on his respirator and keeps on fighting.

2. If he gets enough choking gas so that he can't carry on, then keep him at rest; keep him quiet; keep him warm.

3. Suppose you have a man who cannot put on his own respirator. You must do it for him. You must be quick, because you have to put on your own facepiece first before you put on his.

4. If a man has a dressing on his head, will it interfere with the protection of the respirator? Practically never. (If at all possible, arrange with the gas instructor to have your class put First Field Dressings on face and head wounds, and prove to themselves in the gas chamber that this is true. If you pinch off the connecting tube, the facepiece will leak; but in the gas chamber they will get protection.)

5. Demonstration (Fig. 10):
   Take a man from the class and have him lie on his back. This man has been knocked out (is unconscious) and cannot put on his own facepiece. Now a choking gas attack occurs. The first thing to do is put on your own respirator. The instructor will have to remove it again in this demonstration, so he can talk freely. Slip the helmet forward on the man's head and take it off. Take out his facepiece; hold it by the outlet valve and pull the head harness over the outside of the facepiece; put the facepiece on his face. The man now has protection, since the facepiece is gasproof, because of its shape, not because of the harness. Holding the facepiece, slip the harness over his head.

6. Practice:
   Class in pairs. Have one of each pair lie down on his back. This man has both arms broken, which you have fixed up. You are standing beside him when you detect choking gas. Hold your breath and put on your own facepiece. Put on his facepiece as shown.

7. Practice:
   With some injuries a soldier may have only one hand to put on his facepiece. You must leave it in such a way that he will be able to get protection quickly if he runs into gas.
   Each man takes out his facepiece and turns the harness back over the facepiece as before. Now your right arm is injured. (Have the class put their right hand under the shoulder brace to be sure they won't use it.) Give a gas alarm and be sure they all get protection.

8. Demonstration:
   Take a man from the class. We find this man rolling on the ground, coughing and choking. We detect choking gas. The first thing to do is put on your respirator. Again for the demonstration the instructor takes the facepiece off. Put on the facepiece of the casualty. What position will we put him in? Because he is coughing violently he will be better propped up, so lean him against a tree, etc. Make him warm. Make him comfortable, so he will stay quiet. Tell him he will be all right, although he is in a bad way just now. You must keep up the general strength of this man. Leave his water bottle handy, so he can take a drink when he takes off his facepiece at the end of the attack. If you are leaving your casualty, this is all you can do for him. Suppose you are with your casualty. What do they often do? Vomit. What can you do? While the stuff is coming out of his mouth, it is safe to lift the side of his facepiece from his face and scoop the stuff out with your fingers. Immediately after he vomits he will take a deep breath, so you must close the side of his facepiece promptly. (Kneel behind the man, so his head is against your chest; reach around the front of his head with your left arm, so that the fingers of your left hand are lifting the right edge of his facepiece; then use the fingers of your right hand to scoop.) (Fig. 11.)
9. Demonstration:
You know enough about blister gases to know that personal decontamination in the first few minutes will protect you from ill effects. Again, if an injured man is unable to do this for himself, you must do it for him.

If a man gets a drop of blister gas in his eye you must wash it out with water immediately. (Emphasize the importance of wearing eyeshields.)

Take a man from the class and demonstrate.

Pull him to the ground from behind, so he doesn't fall.

Take off your small pack, undo the flap, and take the cork out of the water bottle.

In position at the head of the man, put your left hand flat across his head about the hair line; put the left thumb so that its pad is on the upper lid of the eye to be washed out. Open the eye by bending the thumb rather than by pulling back with the whole hand (Fig. 12).

Keep his head slightly turned, with the affected eye down, and, without taking time to get the water bottle from the pack, pour the water in his eye. (Note.—In practice have the water bottles empty. Do NOT pour water into the eye in this demonstration or in the following practice.)

Put on clean eyeshields.

Keep the light from the affected eye by covering the outside of the eyeshield over it. Use the cloth cleaning and disinfecting, or his towel, or if nothing else his First Field Dressing (you would want to save the First Field Dressing).

He is able to walk back; he may have trouble seeing and need someone to help him.

10. Practice:
Class in pairs.

First one of the pair gets a drop of blister in his eye. He feels something in his eye, and you see that the drops of blister have made brownish-red marks on his sleeve detectors.

The other man gets this one on the ground on his back as shown.

Takes off his own pack and opens it as shown.

Opens the eye as shown.

Goes through the motions of pouring water into the eye (only have the water bottles empty for this practice).

Puts on fresh eyeshields; keeps the light from the affected eye as shown.

This man should be sent to medical aid; if only one eye is covered he will be able to walk by himself.

1. Divide the class into threes. Have one of each three be a casualty. Give him a tag and send him to the "battlefield," which can be another room, or the other end of a drill hall, if the weather is unsuitable for working outside. The remaining two are given three practice First Field Dressings and are sent out to fix up the injured and bring them back.

2. At the "battlefield" have a supply of poles suitable for improvising stretchers, and a few short sticks that may be needed for splints, etc. The casualties are to be brought in by hand carriage or, if necessary, by stretcher, which will have to be improvised.

3. Warn the class that this is a review practice and that ordinarily they will be fixing up their comrades and going on and leaving them. Fighting comes first.

4. When the casualty is brought in, discuss with the group that fixed him up what they did for him. Rotate casualties and continue as time permits.

5. During the exercise take the opportunity of observing the members of the class giving practical care; supplement this with questioning to evaluate the man's proficiency in First Aid.

6. Suggested casualty tags:
(a) Hit by a bullet in the right upper arm; the arm hangs useless by his side. On looking him over you find another wound at the top of his belly. Blood is oozing from both wounds.

(b) Caught in machine-gun fire. One bullet struck him in the lower part of the belly on the left side. Another on the top of his right thigh; the thigh appears bent at this spot. Blood is dripping from the wounds.

(c) Struck on the right knee by a fragment from a shell which exploded thirty feet away. You look and find another fragment struck him on the right side of the chest. Blood is dripping from the wounds.

(d) Forty feet away from a recent shell hole you find this casualty lying on his back. Blood is spurting in gushes from a wound at the lower end of his left thigh. On looking you find another wound on the tip of his left shoulder. He is unable to move his left foot, and his leg appears bent where the fragment struck his thigh.

(e) Mortar bomb exploded a few feet away. Right side of lower jaw carried away by one fragment. Another fragment struck his right arm halfway between his shoulder and elbow. Blood is dripping away from the wounds.
(f) Shell exploded twenty feet away. Casualty unconscious (knocked out). You look and find a wound on the top of his head. You look further and find he has another wound on his left shoulder.

(g) While moving across open ground, this casualty was caught by machine-gun fire. One bullet hit him at the top of the right thigh, and the leg appears to be twisted at this spot. You find another grazing wound on the left calf. The blood is running slowly from both wounds.

(h) This man was riding on a tank when he was hit on the left side of the chest by a shell fragment. He fell and his right hand was caught in the track and his hand was badly crushed.

(i) In a bayonet fight; was slashed across the front of the right forearm just below the elbow. Blood is pouring in spurts from the wound.

(j) This man was taking aim with his rifle when a sniper saw him. The bullet went right through the left forearm and entered the left side of the chest.

(k) You have just taken this man from the river, where he was drowning. He is not breathing.

FA-20. REVIEW

This period is to consist of the showing of the film "First Aid in the Field" or in recapitulation of those aspects of First Aid which the exercise showed as needing review.
SUGGESTED ANSWERS TO COMMON QUESTIONS

1. What is infection?
   Means germs get into a wound. Germs are found on hands and in the breath of people. They get into a wound through carelessness, touching or breathing on the wound or on the sterile (i.e. free of germs) dressing.

2. How can I tell the wound is infected?
   Nobody can tell for many hours. The important thing is to keep germs from getting into the wound.

3. Are there just two pressure points?
   There are two places (not points) you should know, because you can find them on yourself without trouble. However, there is a tube leading to every wound where blood is spurting or pouring out of the wound, and by feeling around for it you can squeeze it.

4. Why expose a wound?
   To be able to apply the First Field Dressing properly. Remember, when exposing a wound, to be gentle (slit clothing) and to keep germs out of the wound (hands, breath).

5. What is a lacerated wound?
   Actually means a torn type of wound; the way you go about fixing it is the same as for any other type of wound. Don't worry what a wound looks like; fix it.

6. Does it hurt terribly when you're hit by a bullet?
   Commonly doesn't hurt much at first. Hence, it is necessary to make a casualty keep quiet; e.g. he might not realize his leg was broken and keep struggling to get up.

7. What is an injured man afraid of?
   Many things. The fears you can handle are (a) that he won't be looked after (efficient care), and (b) that he will be left and forgotten (stick rifle in ground).

8. Why not give a drink to a man with a belly wound?
   It may kill him. There may be holes in his guts.

9. Why not give a drink to a man who is unconscious?
   It will choke him because he can't swallow.

10. Are there special things to watch about wounds of the face?
    You will probably think they are much worse than they are; you must not show your fear. Be careful you don't cut off breathing with the First Field Dressing. Place him face down, so the blood doesn't run into his mouth and choke him.

11. Do you pull belly wounds in the "jackknife" position?
    Rarely; most belly wounds are small, and it helps only when the wound runs most of the way across the belly; if the wound is small it doesn't help and is uncomfortable.

12. What do the books mean by "unnatural movement"?
    They give it as one of the ways to tell a bone is broken. The broken bones you will see will be obviously broken, so it is unnecessary. It is very painful. It means that where a limb should be solid, you could (never do) bend it.

13. What is a sprain?
    When the man says he sprained his ankle, he means he twisted it and it hurts. Usually he will carry on. Sometimes it will hurt too much and he will hobble back with a stick, or he may even have to be carried.

14. Why don't you teach us the ways to use triangular bandages?
    The only First Aid equipment a soldier has with him is his First Field Dressing. He does not carry triangular bandages. You can improvise bandages (web, shirts, scarfs, etc.) that are as good if not better.

15. How do you rouse the unconscious casualty?
    You don't. You can't; and by trying you will probably cause more injury.

16. What can you do for a man if his arm is blown off?
    This, to the first aider, is just another wound, perhaps more serious than some, and he will treat it as he has been taught for other wounds.

17. What is a broken back?
    A back gets broken the same way as other bones. You must hold it steady as with other breaks, and it needs several people to do this. If you are alone don't try to move him. Do NOT bend or twist the back.

18. How do you go about washing out a wound?
    You don't. (Nothing to do it with; nowhere to do it, etc.) You prevent infection by keeping germs out of the wound (hands, breath).

19. What do you do if the broken bone is sticking out of the wound?
    Do not attempt to push or pull the bone back in. Handle as you would any broken bone.

20. Do you put a man with an injured chest with the injured side up or down?
    Put him in the most comfortable position for breathing. (This is usually sitting up.)

21. How should you get a piece of metal out of a wound?
    You would have to put your fingers (germs) into the wound to do it. You don't.
22. What is capillary bleeding?  
What you do with bleeding is stop it, not call it by long-winded names. You have been trained how to stop bleeding, and that is all that matters.

23. How can we recognize shock?  
You do all you can to keep up the general strength of every wounded man. If his strength is low (what you mean by shock) you do the same things. You don't need to recognize it.

24. How can you tell a casualty is dead?  
If in doubt, give him a chance.

25. What is paralysis?  
Has nothing to do with First Aid. (Means loss of use of muscles due to nerve injury.)

26. What do you do for a dislocated shoulder?  
Put the arm in a sling and send the man to the R.A.P. Don't monkey with it.

27. What do you do for broken ribs?  
If there is a wound, put on a dressing and bandage firmly, put the arm in a sling, and send the man to the R.A.P.

28. What is concussion?  
A long word for knocked out by a blow on the head.

29. What is a complicated fracture?  
A term used by medical people for certain types of fracture. Has nothing to do with First Aid. (Means broken bone plus injury to brain, lung, nerve, liver, etc.)

30. What is hysteria?  
A nervous condition. Injured soldiers do not go crazy or become hysterical.

31. Why does a tourniquet, that is too loose, increase bleeding?  
A tourniquet that is too loose does not stop bleeding, so make it tight enough that it will stop the bleeding; that is your job. (Actually the veins are shut off, the arteries are not, so blood can get in and not get out except through the wound.

32. Should a pad be put under the tourniquet?  
No. It is unnecessary and a waste of precious time.

33. What do you do for snake bite?  
If you are fighting in a snake-infested area, you will receive special instructions.

34. What do you do if the casualty won't let you treat him?  
Don't worry, the casualty will be only too glad to have you help him.

35. What would you do for a case of poisoning?  
Take the casualty and the bottle to the M.O. It would occur only around barracks.

36. If both legs are broken, do you need two splints?  
Splint one leg with his rifle. The leg with the splint on will serve as a splint for the second leg.

37. If a leg is badly broken or broken in more than one place, do you still pull on it to steady it?  
Yes. A broken limb must be steadied, and the way to do it is to pull on it.

38. If a man has a fit, what would you do for him?  
Don't be afraid of him. All he does is violent shaking; he won't try to hit you. See that he doesn't hurt himself with the violent shaking. The fit will be over in a few minutes. Get the M.O.

39. What do you do for trench foot?  
Take the man to the M.O. It is not an emergency.

40. What is the best stimulant for the treatment of shock?  
What you do is keep up the strength of the injured man. Tea and coffee are good stimulants to give because they are hot and because they are practically all water. You do not have them; the injured man needs fluids; so give him water, which you have. Alcohol is not a stimulant.

41. Why not put a tourniquet below the knee?  
Because the tube (artery) you are trying to squeeze will slip between the two bones where you can't squeeze it. Above the knee (true also above the elbow) there is only one bone and the tube must be pinched.

42. Should iodine be poured into the wound or just put on the dressing?  
Neither; you don't have it. You wouldn't use it if you did have it. You prevent infection by keeping germs out of the wound (fingers, breath); apply the First Field Dressing, which is sterile (free of germs).

43. What kind of ointment would you put on burns?  
None. Cover the exposed burn with dry dressings that are free of germs.

44. What kind of a sling should you use for a man with a bullet wound in his shoulder?  
Improvise one (not a broad arm sling, or a St. John arm sling, etc., as you don't have triangular bandages); put his arm inside his battle dress blouse, or his hand inside the front of his blouse, etc.

45. How many bandages do you need to fix a broken thigh bone?  
As many as are needed to hold the leg, so it cannot move. Usually this takes all his webbing, rifle sling, anklets, etc.