

Drills and exercises.

Contributors

Great Britain. Army. Royal Army Medical Corps.
Great Britain. Army Council.

Publication/Creation

[London] : War office, 1951.

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TRAINING PAMPHLET

No. 1

DRILLS AND EXERCISES

(Supersedes W.O. Code No. 602)

1951

By Command of the Army Council

G. W. Pinner.

THE WAR OFFICE,
9th August, 1951

PREFACE

The Royal Army Medical Corps Training Manual 1935, and RAMC Training Pamphlets Nos. 1 and 2 (1943) and No. 3 (1944) are replaced by:—

RAMC Training Pamphlet No. 1 (1951)—Drills and Exercises.

RAMC Training Pamphlet No. 2 (1950)—The Medical Services in the Field.

RAMC Training Pamphlet No. 3 (New Edition Pending)—First Aid and Nursing for Other Ranks.

THE WAR OFFICE,
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KEY TO FIGURES.

COMMANDING OFFICER.



COMPANY OR SECTION COMMANDER

FIELD UNITS



COMPANY OFFICER

PEACE UNITS



OTHER R.A.M.C. OFFICERS

a)

MEDICAL.



b)

NON-MEDICAL.



R.A.D.C. OFFICERS.



QUARTER-MASTER



R.A.S.C. OFFICER.



REGIMENTAL SERJEANT MAJOR.



QUARTER-MASTER-SERJEANT.



COMPANY-SERJEANT MAJOR, OR S/SGT OR SGT. R.A.S.C.



STAFF SERJEANT OR SERJEANT



BUGLER.



R.A.M.C. RANK AND FILE.

FRONT.



CENTRAL.



REAR.



AMBULANCE CAR

a) 4 STRETCHER.



b) 2 STRETCHER.



CAR, 4 SEATER, 4 x 4.



CAR, 5 CWT, 4 x 4.



TRUCK 15 CWT, 4 x 4 G.S.



TRUCK 15 CWT, 4 x 2, WATER 200 GALLONS.



LORRY 3 TON, 4 x 4 G.S.



LORRY 3 TON, 4 x 4, TROOP CARRYING.



MOTOR CYCLE, SOLO.



TRAILERS:

a) 1 TON, 2 WHEELED G.S.



b) 10 CWT, 2 WHEELED G.S.



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DRILLS AND EXERCISES

CHAPTER 1

GENERAL INSTRUCTIONS

1. **Drill.** Foot drill and ceremonial drill throughout the Royal Army Medical Corps will be carried out in accordance with the publications, Drill (All arms) 1950, W.O. Code No. 8510 and Ceremonial, 1950, W.O. Code No. 8470.

2. **Corps march.** The regimental march of the Corps is "Here's a Health unto His Majesty" published by Messrs Boosey & Hawkes Ltd., Regent Street London.

3. **Bugle calls.** The calls for the RAMC are given in Trumpet and Bugle Calls for the Army. The following is the RAMC call:—

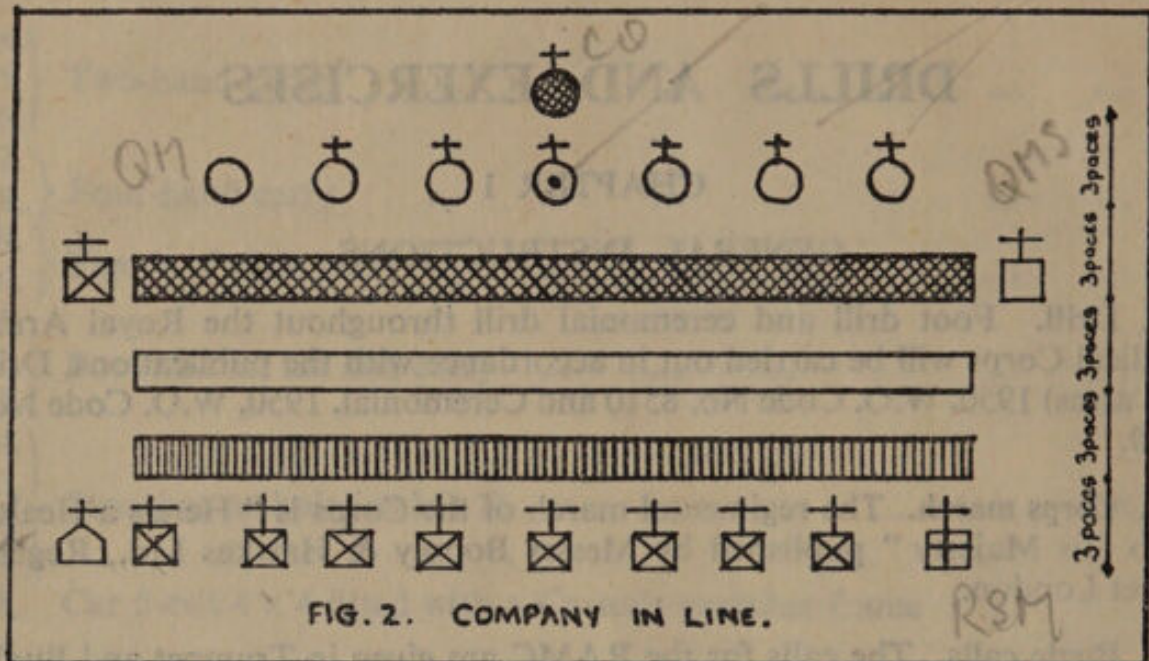


CHAPTER 2

CEREMONIAL DRILL

4. **Review of a company.** A company of the RAMC will be drawn up in review order in accordance with the diagram at Fig 2:—

- (a) When the reviewing officer comes to a halt in front of the centre of the company the CO will give the command "No. . . . Company, General (or Royal) Salute—Salute." The salute will be sounded by a bugle or played by a military band. All officers will salute in time with the CO on the first note of the General (or Royal) Salute and recover the position of attention after the last note.
- (b) The CO will accompany the reviewing officer, walking on the side furthest from the troops, on his inspection of the company in the following order: leading rank, centre rank, rear rank, supernumerary rank.



- (c) The company officer will meet the reviewing officer at the beginning of the leading rank, two paces in front of the leading file, and give the company state.
- (d) After the inspection, if a march past is ordered, this will be carried out in accordance with the publication, Ceremonial, 1950.
- (e) If an advance in review order is required, this will be carried out in accordance with Ceremonial, 1950. On the completion of the advance in review order, the General (or Royal) Salute, will be given, after which the CO will advance to the reviewing officer for instructions to dismiss the company.
- (f) If a march past in line is ordered, the company will be divided into platoons not exceeding 12 files. The CO will give the command, "Company will march past in close column of platoons, No. 1 platoon leading: right turn." The officers having taken up their positions, the leading platoon commander will give the command "No. 1 platoon, by the left, quick march." On arrival at the saluting line he will give the command "Platoon will advance: left turn." Seven paces before he arrives at the saluting base he will give the command "No. 1 platoon: eyes right" on the left foot. On the next left foot he will salute and the platoon, with the exception of the right guide, will turn their heads and eyes to the right. After the platoon have passed the saluting base he will give the command "No. 1 platoon: eyes front" on the left foot. On the next left foot he will recover the salute and the platoon will turn their heads and eyes to the front.

The same procedure will be adopted by successive platoon commanders.

5. **Review of a field ambulance.** A field ambulance will be drawn up in line in accordance with Fig 3.

CHAPTER 3

FORMATIONS AND MOVEMENTS OF A FIELD AMBULANCE (other than Review Order)

6. The field ambulance may be drawn up in line, as in review order (Fig 3), or for purposes of moving off in vehicles, the field ambulance may be drawn up in close column as in Fig 4.

7. Order of march

(a) The order of march of a field ambulance moving independently in a theatre of operations depends on the prevailing circumstances.

One such order is:—

No. 1 Section.

No. 2 Section.

Company Headquarters.

No. 3 Section.

Headquarters.

Headquarters Section.

(b) A field ambulance moving with a brigade group moves as ordered by the brigade commander. A possible formation is:—

Battalion.

No. 1 Section.

Battalion.

No. 2 Section.

Company Headquarters.

Brigade Headquarters.

Headquarters.

Headquarters. Section

Battalion.

No. 3 Section.

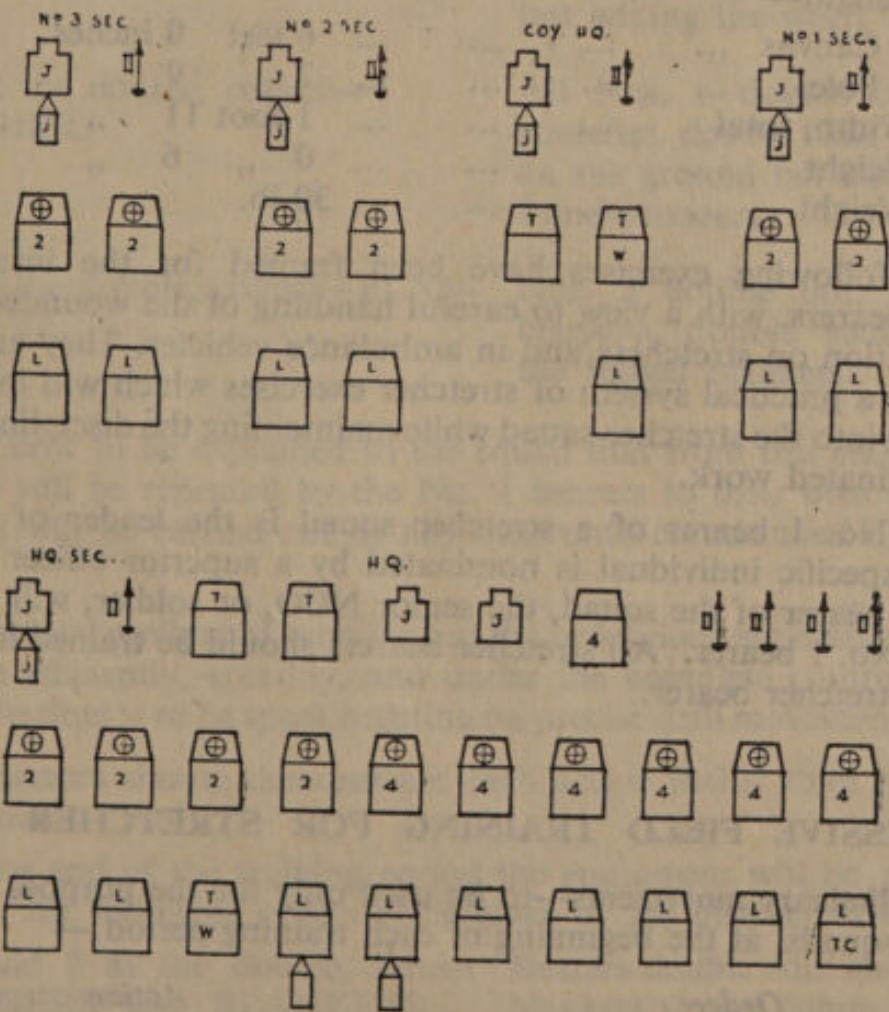


FIG 4.—A field ambulance in close column

CHAPTER 4

STRETCHER EXERCISES

8. **Army pattern ambulance stretchers.**—The standard stretcher in general use in the Army is the Stretcher Mark II.

A second pattern has been designed for use by airborne forces; it is much lighter than the standard pattern, and is collapsible.

In the Mark II stretcher the canvas, which is tanned, is fastened to the poles by nails; the poles are squared and kept apart the required distance by two flat, wrought iron, jointed bars called traverses, and are fitted on the under side with steel U-shaped runners. The pillow is wedge-shaped, varying from $1\frac{1}{2}$ to $3\frac{1}{2}$ inches in thickness. There are eyelet holes in the canvas of the stretcher at both ends for the attachment of the pillow by thin leather thongs, and is fitted with two canvas straps, one at each end, to secure the stretcher when closed. Webbing slings are provided for assistance in carrying stretchers over long distances.

The following are the dimensions, etc., of the Mark II stretcher:—

Length—

Canvas	...	...	...	...	6 feet	0 inches.
Pole	...	...	...	...	7 "	9 "
Width, total	...	...	...	...	1 foot	11 "
Height	...	...	...	...	0 "	6 "
Weight	...	...	...	...	30 lb.	

9. The following exercises have been framed for the instruction of stretcher bearers, with a view to careful handling of the wounded and their transportation on stretchers and in ambulance vehicles. They are designed to provide a practical system of stretcher exercises which will inculcate the team spirit into the stretcher squad while maintaining the discipline necessary for co-ordinated work.

The No. 1 bearer of a stretcher squad is the leader of the squad. Unless a specific individual is nominated by a superior officer to become the No. 1 bearer of the squad, the senior NCO, or soldier, will assume the duties of No. 1 bearer. All stretcher bearers should be trained in the duties of No. 1 stretcher bearer.

PROGRESSIVE FIELD TRAINING FOR STRETCHER BEARERS

10. **Preliminary movements**—to be used only for the purpose of forming stretcher squads, at the beginning of each training period:—

<i>Order</i>	<i>Action</i>
Tallest on the right, shortest on the left, in single rank—SIZE.	Turn right, break away and double to correct position.

*Order**Action*

From the right at half pace intervals—
EXTEND.

Right-hand man stands fast, remainder right hand on hip, eyes right, and ease off to the left until clear of the man on the right.

By fours—NUMBER.

Number from right to left in fours (ie, 1, 2, 3, 4—1, 2, 3, 4). Each man cuts his hand to the side and turns head and eyes to the front as he numbers.

Nos. 3 and 4 bearers, three paces step back—two paces right close—
MARCH.

This order is carried out, thus forming stretcher squads. Bearers are already numbered; therefore, no proving of bearers is necessary.

By squads—NUMBER.

No. 1 bearer of each squad numbers from right to left, the first and last adding the word "Squad."

Nos. 1 at the double, collect—
STRETCHER.

All Nos. 1 double out, seize a stretcher, double back and place it on the ground between Nos. 1, 2, 3 and 4 bearers.

Nos. 3 at the double, collect—BLANKETS.

Nos. 3 double out, collect two blankets, double back and hold the folded blankets.

It is now to be explained to the squad that from this stage onwards, all orders will be repeated by the No. 1 bearers to their own squad. No movement will be carried out by any man until commanded by his No. 1 bearer.

The actual method of carrying out the order does not matter, providing it is done efficiently, speedily, and under the complete control of No. 1 bearer. No time is to be spent insisting on precise drill movements.

Instructors should demonstrate each action rather than give lengthy verbal detail.

At the end of the training period the equipment will be returned to the dump, the following orders being given by the instructors:—

Nos. 1 and 3 at the double, return
STRETCHERS and BLANKETS.

Bearers double with stretchers and blankets to the dump, hand them over quickly, and return at the double to their squads.

1st PERIOD

(CARRIAGE OF STRETCHERS AND BLANKETS)

11.

<i>Order by Instructor</i>	<i>Order by No. 1 Bearer</i>	<i>Action</i>
Open STRETCHER.	Open STRETCHER.	Done by Nos. 2 and 4 bearers.
Close STRETCHER.	Close STRETCHER.	Done by Nos. 2 and 4 bearers.
For carriage, pre- pare STRETCHER.	For carriage, pre- pare STRETCHER.	Nos. 2 and 4 bearers open stretcher and turn it up- side down while No. 3 bearer places folded blan- kets on the canvas. Nos. 2 and 4 bearers close and strap stretcher, and com- plete the movement by standing holding stretcher in right hand.
At the double carry —ON.	FOLLOW ME.	Squads disperse fanwise at the double.
Take COVER.	Take COVER.	All fall flat.
CARRY ON.	FOLLOW ME.	Continues at the double.
Fall IN.	About TURN.	Bearers, in changing hands, turn about inwards towards the stretcher and return at the double to fall in as before.

2nd PERIOD

(USE OF BLANKETS)

12. The instructor demonstrates how to use one, two or three blankets, ground sheet and gas cape, for the best protection of the patient.

With one blanket (Figures 5 and 6)

Place blanket diagonally over the stretcher.

Wrap from side to side and tuck in.

Wrap head and feet.

With three blankets (Figures 9 and 10)

As with two, but use the third doubled lengthwise and laid over the patient before the other ones are folded over him. Ground sheet will be placed overall, and tucked well in. Each method is then practised repeatedly by each member of the class.

With one blanket

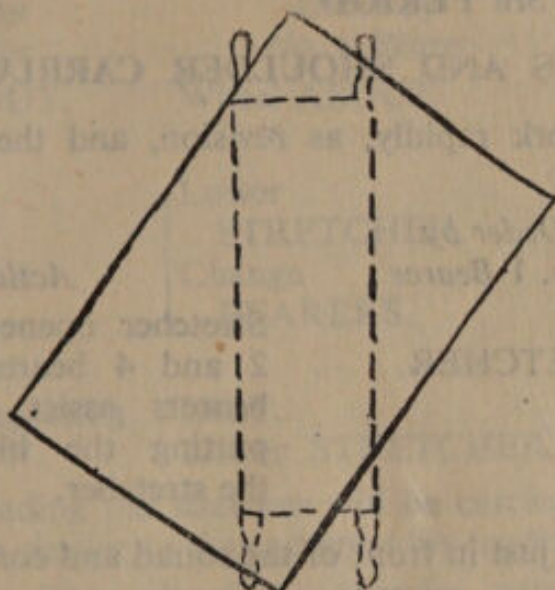
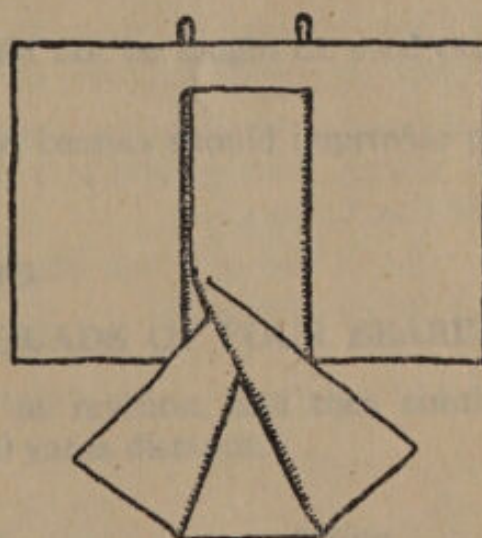
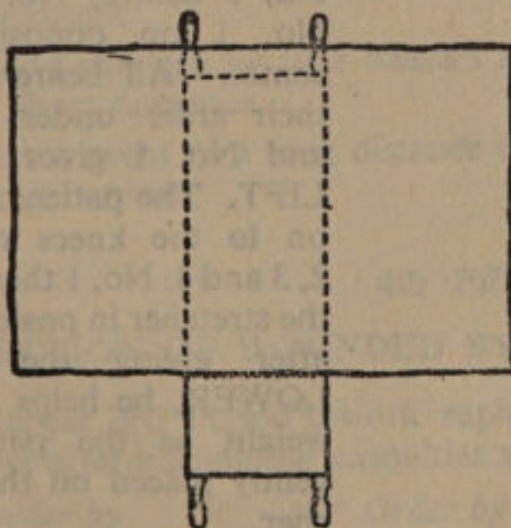


FIG 5



FIG 6

With two blankets



With three blankets

FIG 7

FIG 8

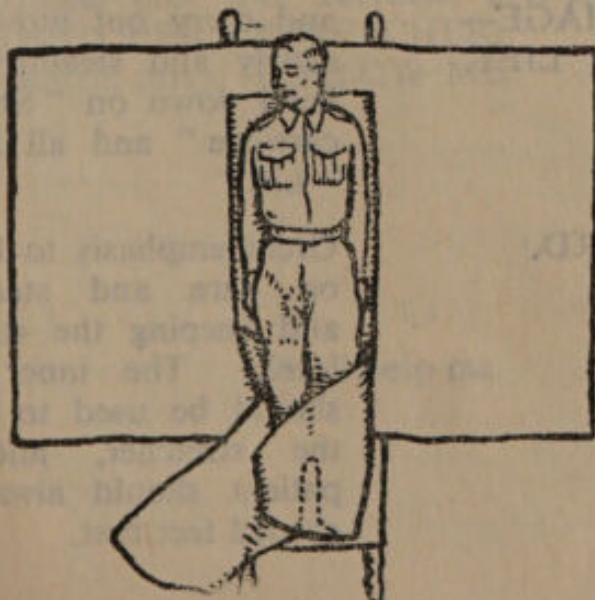


FIG 9



FIG 10

3rd PERIOD

(LOADING STRETCHERS AND SHOULDER CARRIAGE)

13. Repeat 1st Period's work rapidly, as revision, and then continue as follows:—

<i>Order by Instructor</i>	<i>Order by No. 1 Bearer</i>	<i>Action</i>
Blanket STRETCHER.	Blanket STRETCHER.	Stretcher opened by Nos. 2 and 4 bearers and all bearers assist No. 1 in putting the blankets on the stretcher.

Now place out casualties just in front of the squad and continue:—

<i>Load</i>	<i>Load</i>	
STRETCHER.	STRETCHER.	Bearers take position alongside patient, No. 4 head, No. 3 centre, No. 2 feet, No. 1 on opposite side centre. All bearers insert their arms under patient and No. 1 gives order—LIFT. The patient is lifted on to the knees of Nos. 2, 3 and 4. No. 1 then places the stretcher in position and after giving the order: LOWER, he helps to take weight as the patient is gently placed on the stretcher.

<i>Shoulder CARRIAGE.</i>	<i>Shoulder CARRIAGE— LIFT.</i>	
		Keep casualty horizontal, and carry out movements slowly and steadily. All bend down on "Shoulder carriage" and all lift on "Lift."

<i>FORWARD.</i>	<i>FORWARD.</i>	
		Great emphasis to be laid on care and steadiness and keeping the stretcher level. The inner hand should be used to steady the stretcher, and the patient should always be carried feet first.

<i>Order by Instructor</i>	<i>Order by No. 1 Bearer</i>	<i>Action</i>
Wheel ABOUT.	Wheel ABOUT.	Squads return by wheeling and not by turning.
Change BEARERS.	(Lower STRETCHER. Change BEARERS.	Lower stretcher, and all bearers change diagonally <i>ie</i> , head to tail and side to side, by moving round two paces clockwise.
Halt on regaining POSITION.	HALT. Lower STRETCHER.	

Unloading the stretcher will be carried out by handling the patient in a manner similar to that adopted for loading.

Note.—Throughout this exercise, squads should not be forced to advance or retire in a rigid straight line. Better results are obtained by permitting squads to proceed in their own time, thus introducing a competitive element.

Hand carriage by four bearers should not be taught or used except for very short distances.

In the event of a long distance carry, bearers should improvise pads for their shoulders.

4th PERIOD

(COLLECTION OF WOUNDED BY SQUADS OF FOUR BEARERS)

14. Repeat 3rd Period's work rapidly, as revision, and then continue as follows after placing out casualties at 20 yards distance.

<i>Order by Instructor</i>	<i>Order by No. 1 Bearer</i>	<i>Action</i>
For carriage, prepare STRETCHER. At the double, carry ON.	For carriage, prepare STRETCHER. FOLLOW ME.	Party doubles out and falls flat just short of the casualty. No. 1 bearer crawls forward and finds out whether the casualty is still alive; if alive, he orders:—
	No. 3 help me.	Nos. 1 and 3 complete examination of patient but, at this stage of training, the wounds are not dressed by the bearers.

*Order by
Instructor*

*Order by
No. 1 Bearer*

Action

Nos. 2 and 4 open and
blanket stretcher.

All bearers take up their
position for loading stretcher.

LIFT : LOWER :
Shoulder carriage
LIFT FORWARD:
HALT: Lower
STRETCHER.

Instructors will criticize action of squads and correct faults in handling the casualties.

5th PERIOD

(STRETCHER LOADING—USE OF SLINGS AND CARRIAGE BY TWO BEARERS)

15. Men parade in Battle Order with the two straps supporting, (of their web equipment) and one stretcher sling in their haversacks.

Repeat 4th Period's work rapidly, as revision, and then proceed with bearers working two to a stretcher, the squads of two bearers being formed as follows:—

No. 3 bearer hands blankets to No. 4, thus making Nos. 2 and 4 into a two-bearer squad.

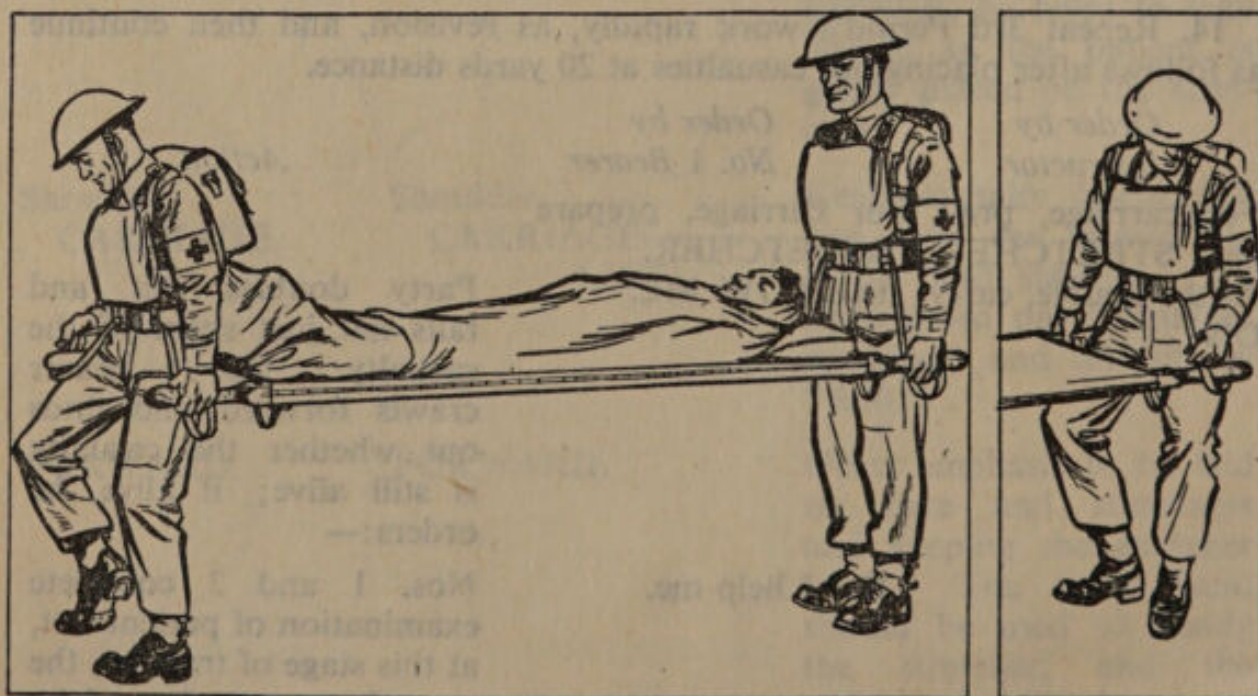


FIG 11.—Attachment of slings to handles of stretcher.

Instructor gives the orders:—

Nos. 1 at the DOUBLE, collect STRETCHER.

Nos. 3 at the DOUBLE, collect BLANKETS.

This provides twice the number of squads having only two bearers to a squad.

Explain that all the front rank are Nos. 1 and all the rear rank Nos. 2, and that all orders are given by No. 1, who is responsible for taking the initiative.

Squads should now be arranged so that the intervals between them are roughly equal, eg, two paces.

Instructor first demonstrates how to wear, adjust and use stretcher slings Mk IV, Ryan slings, and improvised slings, and then how two bearers load and pick up the stretcher. In order to slip the sling loops on or off the handles it is necessary for the bearers to balance the stretcher handles on their alternate knees, as in Fig 11.

<i>Order by Instructor</i>	<i>Order by No. 1 Bearer</i>	<i>Action</i>
Blanket STRETCHER.	Blanket STRETCHER.	—
Load STRETCHER.	Load STRETCHER.	The casualty is lifted by bearers astride the patient, as shown in Fig 12.
Hand CARRIAGE.	Hand carriage— LIFT.	—
	Attach slings: FORWARD.	—
Wheel ABOUT.	Wheel ABOUT.	—
Lower STRETCHER.	Lower STRETCHER.	—

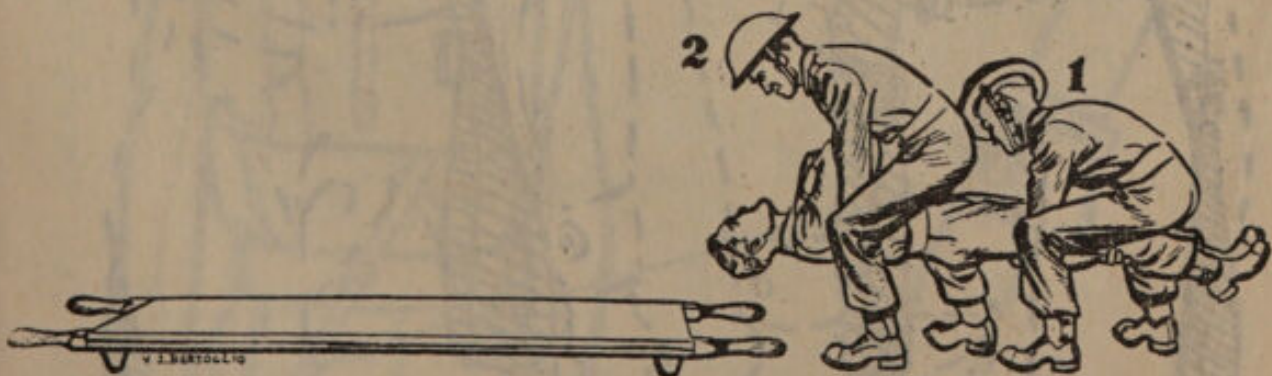


FIG 12.—Loading stretcher by two bearers.

Instructor will now demonstrate how to improvise slings by use of the straps supporting, or triangular bandages, or rope. The squad copies; No. 2 helping No. 1 and *vice versa*. Repeat movements using these improvised slings, as shown in Figs 14, 15a and 15b. "Straps, supporting sling."



FIG 13.—Slings stretcher, Ryan pattern.

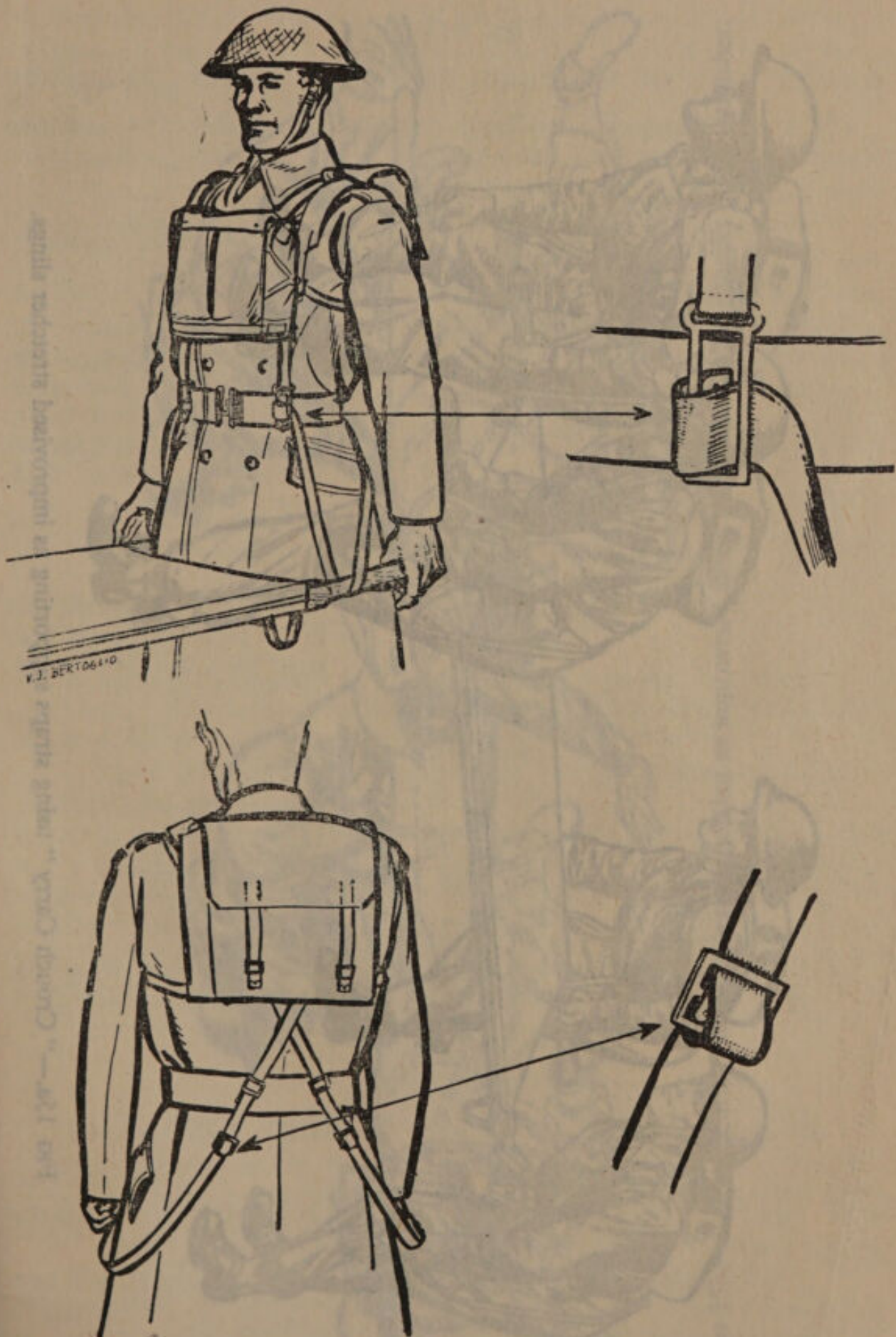


FIG 14.—Uses of “straps supporting” of pack as stretcher sling. If straps supporting are not available, triangular bandages or pieces of rope knotted to the belt may be used.



FIG 15a.—“Crouch Carry” using straps supporting as improvised stretcher slings.

FIG 15a.—“Crouch Carry” using straps supporting as improvised stretcher slings. If straps supporting are not available, fragments of bandages or pieces of rope knotted to the belt may be used.



FIG 15b.—“Crawl Carry” using straps supporting as improvised slings looped round the runners of the stretcher.

6th PERIOD

(COLLECTION OF WOUNDED BY SQUADS OF TWO BEARERS)

16. Place casualties out 50 yards from the squad and work with two bearers to a stretcher, as in 5th Period.

<i>Order by Instructor</i>	<i>Order by No. 1 Bearer</i>	<i>Action</i>
For carriage, prepare STRETCHER.	For carriage, prepare STRETCHER.	—
At the double, carry ON.	FOLLOW ME.	Party doubles out and falls flat just short of the casualty. No. 1 determines whether he is still living. Both bearers work together to blanket and load stretcher.
	Hand carriage — LIFT.	
	Attach slings— FORWARD.	No. 1 in rear, patient feet first. No. 1 steps off with right foot, No. 2 with left.
	HALT: Lower STRETCHER.	

7th PERIOD

(COLLECTION OF WOUNDED AFTER GAS ALARM)

17. Instructor gives the alarm "GAS."

Check any men not obtaining protection speedily and efficiently. With respirators at gas position perform 6th Period's work.

8th PERIOD

(COLLECTION OF WOUNDED WITHOUT THE USE OF STRETCHERS)

18. First teach the squad the correct method of crawling to the casualty on the ground—without raising the buttocks, shoulders or heels.

The following methods of lifting and carrying a casualty will then be demonstrated by the instructor and imitated by the squads working in pairs and competing with each other for speed and efficiency:—

- | | | |
|-----------------------------|----------------------------------|------------------------------------|
| 1. Fireman's lift and carry | (Figs 28, 29 and 30) | Run 20 yards. |
| 2. Back lift and carry. | (Figs 31 and 32) | Run 20 yards. |
| 3. Neck drag. | (Figs 33 and 34) | Drag 5 yards. |
| 4. Double sling drag | (Figs 35, 36 and 37) | Drag 5 yards. |
| 5. Single sling drag | (Figs 38, 39, 40, 41, 42 and 43) | Crawl 10 yards and carry 10 yards. |

Working in threes:—

- | | | |
|--------------------------------|----------------------|-----------------|
| 6. Two hand carry | (Figs 44, 45 and 46) | Walk 50 yards. |
| 7. Four hand carry | (Figs 47 and 48) | Walk 50 yards. |
| 8. Figure of eight carry | (Figs 49 and 50) | Carry 20 yards. |
| 9. Fore and aft lift and carry | (Figs 51, 52 and 53) | Walk 50 yards. |

The performances of these lifts are detailed in Chapter 5, Figs 28 to 53.

9th PERIOD

(USE OF COVER AND PRACTICE IN CONCEALMENT BY STRETCHER BEARERS)

19. Instruct the squads in the elements of personal concealment and field craft. March the squad to a suitable area of uneven ground. Explain the position of the enemy, snipers, our forces and casualties.

After the preliminary movements and preparing stretchers for carriage, give the command—"CARRY ON."

Action is taken by the squad as in the 4th and 6th Period's work, but in addition concealment is practised by crawling, running short distances, carrying close to hedges, walls or under trees, making use of shadows and dead ground.

If "Thunderflash" bombs are available, these should be thrown directly at any squad breaking cover.

10th PERIOD

(LOADING AND UNLOADING AMBULANCE CARS)

20. Proceed as in 3rd Period to the stage of "LOAD STRETCHER."

Detail one man to act as ambulance orderly, who will open the ambulance car doors and let down the step.

Explain to the squads that patients are loaded head first into the compartments in the following order:—

Left upper, right upper, left lower, right lower.

On the command "CARRY ON" No. 1 of No. 1 squad will give the order "FORWARD." On reaching the ambulance the party will halt without word of command, grasp and raise the stretcher as for shoulder carriage, until level with the compartment to be filled. The bearers nearest the car will place the runners in the grooves, first outer, then centre; then assist the others to push the stretcher home. The orderly secures the stretcher. The party then doubles back to the previous position.

The remaining squads then carry out the same procedure until the ambulance is loaded.

Explain to the squad that on the command "UNLOAD AMBULANCE," exactly the reverse procedure is carried out, *ie*, the No. 1 bearer of No. 4 squad gives the command "FOLLOW ME," whereupon his squad double forward and unload the right lower compartment. The No. 1 bearer then gives the command "FORWARD" and the whole squad proceeds back to its position, being halted on arrival by No. 1 bearer. This procedure is repeated until all the patients have been unloaded.

21. When it is necessary for any reason to strap the patient to the stretcher, this is done by means of a webbing harness, described and illustrated below—

(A) DRILL FOR THE APPLICATION OF THE STRETCHER HARNESS "MANIFOLD"

(Nos. 1 and 2 Bearers adjust harness, Nos. 3 and 4 Stand Fast)

1. Casualty is laid on the prepared stretcher and blanketed.

2. (a) No. 1 places the harness on the casualty so that the widened part covers the trunk, with cross strap marked "1" one hand's breadth below the chin. No. 2 assists No. 1 and bunches the free ends of the traverse straps at the side of the stretcher.

(b) (For Casualties of Abnormally small size—five feet four inches and under).—The harness is placed on the casualty with the wide part covering the trunk and No. 1 threads the casualty's head through the top window and pulls it down so that the cross strap marked "1" fits snugly behind the neck. No. 2 assists No. 1 and bunches the free ends of the transverse straps at the side of the stretcher.

3. Nos. 1 and 2 lift the stretcher to knee level and move it to the side until the transverse straps protrude on the buckle side.

4. No. 1 now passes the upper longitudinal head straps OVER the top of the stretcher, UNDER the handle, THROUGH the runner and makes secure by fastening to the buckle on its own side on the cross strap marked "1."

5. At the same time No. 2 is loosely buckling off the four transverse straps working from the head to the feet.

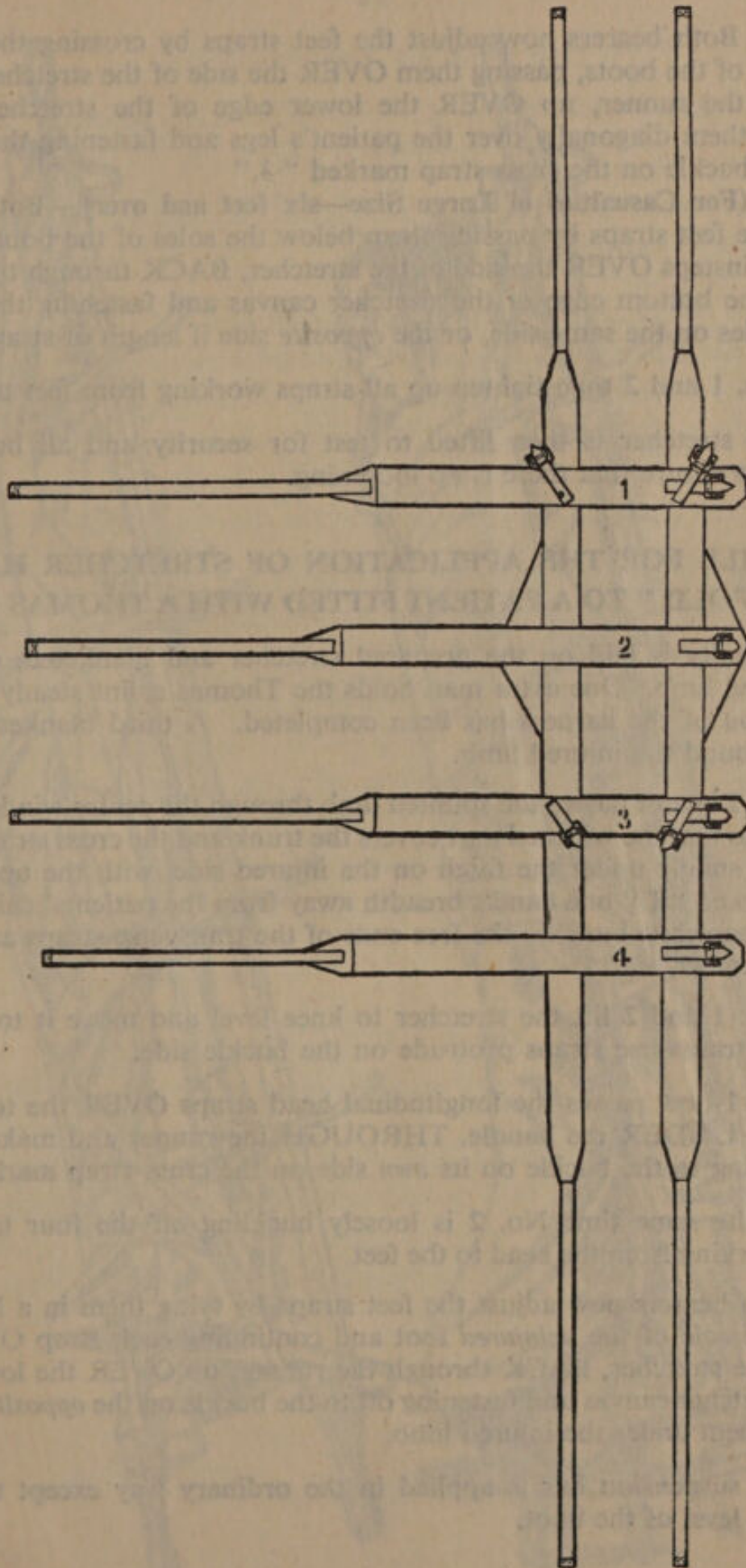


FIG 16

6. (a) Both bearers now adjust the feet straps by crossing them below the soles of the boots, passing them OVER the side of the stretcher, BACK through the runner, up OVER the lower edge of the stretcher canvas, crossing them diagonally over the patient's legs and fastening them to the *opposite* buckle on the cross strap marked "3."

(b) (For Casualties of Large Size—six feet and over).—Both bearers adjust the feet straps by passing them below the soles of the boots, BACK over the insteps OVER the side of the stretcher, BACK through the runner, OVER the bottom edge of the stretcher canvas and fastening them off to the buckles on the same side, or the *opposite* side if length of straps permit.

7. Nos. 1 and 2 then tighten up all straps working from feet to head.

8. The stretcher is then lifted to test for security and all buckles inspected to ensure that there is no loosening.

(B) DRILL FOR THE APPLICATION OF STRETCHER HARNESS "MANIFOLD" TO A PATIENT FITTED WITH A THOMAS SPLINT.

1. Casualty is laid on the prepared stretcher and blanketed, excluding the injured limb. One extra man holds the Thomas splint steady until the application of the harness has been completed. A third blanket is rolled neatly around the injured limb.

2. No. 1 bearer passes the splinted limb through the centre window of the harness, so that the widened part covers the trunk and the cross strap marked "3" fits snugly under the thigh on the injured side, with the upper cross strap marked "1" one hand's breadth away from the patients' chin. No. 2 bearer meanwhile bunches the free ends of the transverse straps at the side of the stretcher.

3. Nos. 1 and 2 lift the stretcher to knee level and move it to the side until the transverse straps protrude on the buckle side.

4. No. 1 now passes the longitudinal head straps OVER the top of the stretcher, UNDER the handle. THROUGH the runner and makes secure by fastening to the buckle on its *own* side on the cross strap marked "1."

5. At the same time No. 2 is loosely buckling off the four transverse straps working from the head to the feet.

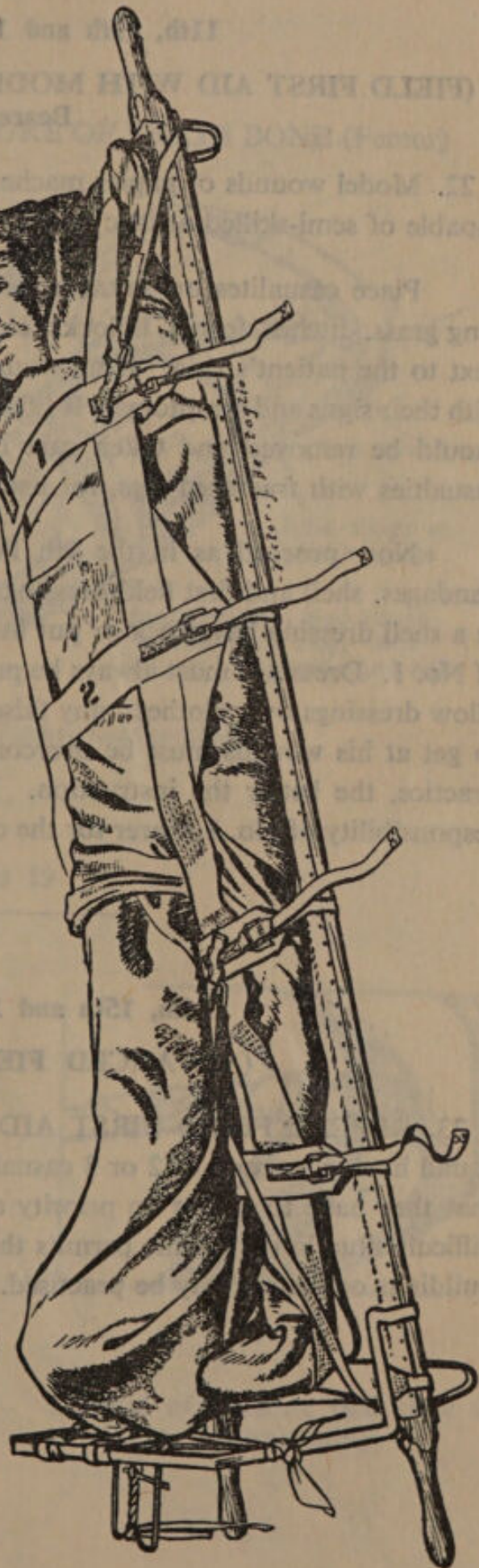
6. Both bearers now adjust the feet straps by tying them in a half knot below the sole of the *uninjured* foot and continuing each strap OVER the side of the stretcher, BACK through the runner, up OVER the lower edge of the stretcher canvas and fastening off to the buckle on the *opposite* side by passing them under the injured limb.

7. The suspension bar is applied in the ordinary way except that it is *below* the level of the boot.

FIG 17



FIG 18



11th, 12th and 13th PERIODS

(FIELD FIRST AID WITH MODEL WOUNDS (Squads of 2 and 4 Bearers))

22. Model wounds of papier mache should be prepared by an instructor capable of semi-skilled artistic work.

Place casualites on suitable training ground featuring trees, shrubs, long grass, ditches, fences, hillocks, etc. Model wounds are affixed by tapes next to the patient's skin. If no wounds are available, label the casualties with their signs and symptoms. If rifles can be obtained, bolts and magazines should be removed and taken care of, and the rifles left lying near the casualties with fractured legs, for use as rifle splints. (See Figs 19 to 27).

Now proceed as in the 9th Period's work, except that triangular bandages, shell and first field dressings (to be opened and used) are carried in a shell dressing haversack or put in the haversack of the web equipment. of No. 1. Dressings must always be put direct on to a patients' skin—never allow dressings over clothes; any false modesty about undressing a patient to get at his wounds must be overcome at once, as the more realistic the practice, the better the instruction. Instructors will call attention to the responsibility of No. 1 bearer for the care of the patient.

14th, 15th and 16th PERIODS

(ADVANCED FIELD FIRST AID)

23. REPEAT FIELD FIRST AID:—(Squads of 2 or 4 bearers), each squad having a group of 2 or 3 casualties of different types to deal with so that they have to decide on priority action. Casualties may be located in difficult situations. If time permits the extraction of casualties from tanks, buildings or craters may be practised.

RIFLE SPLINT FOR FRACTURE OF THIGH BONE (Femur)

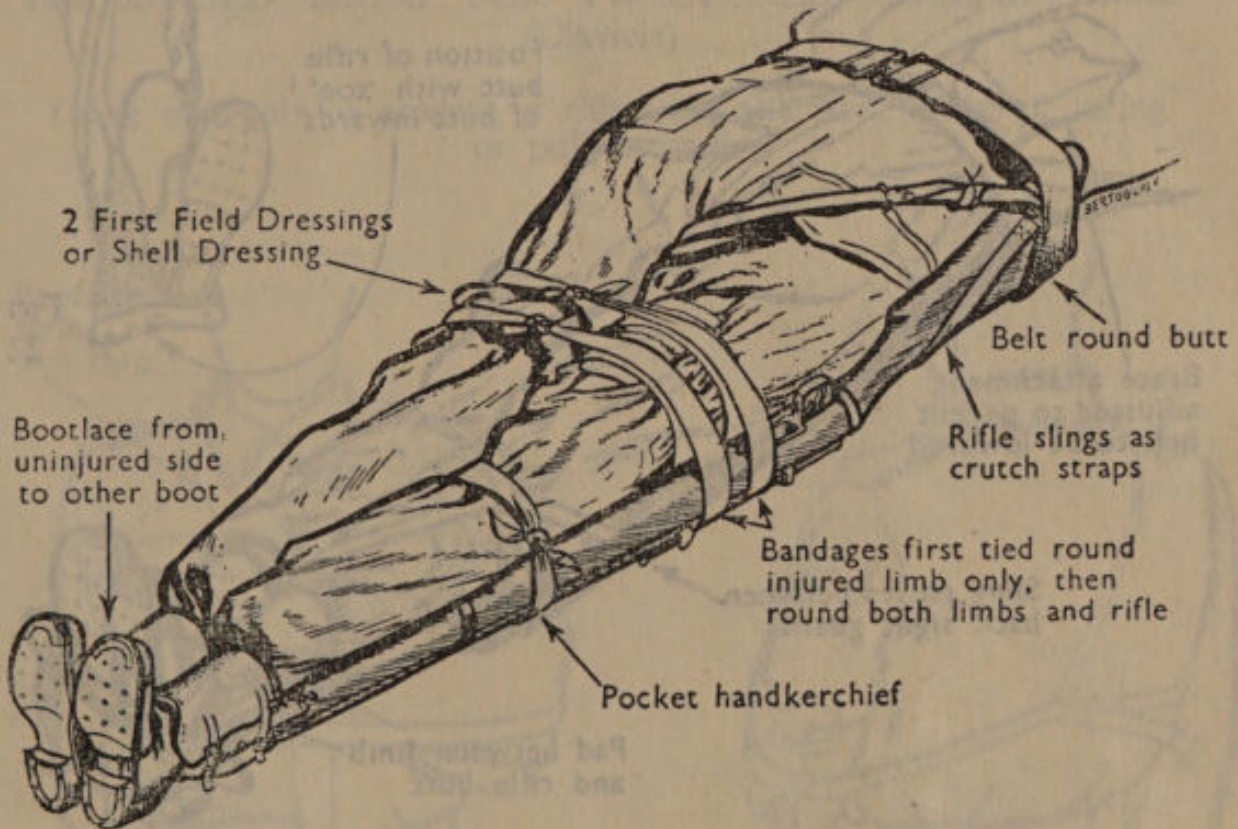


FIG 19

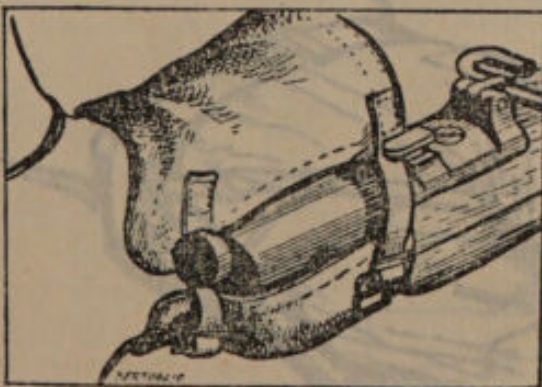


FIG 20

Position of bayonet bosses on anklets straps

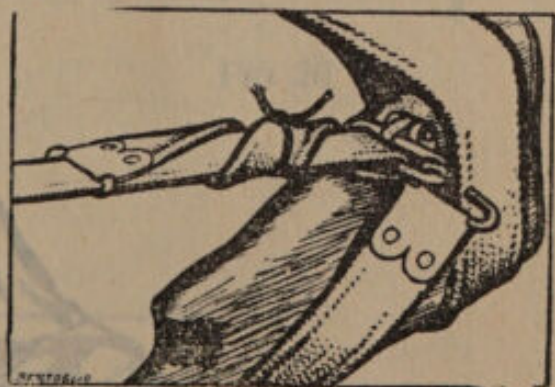
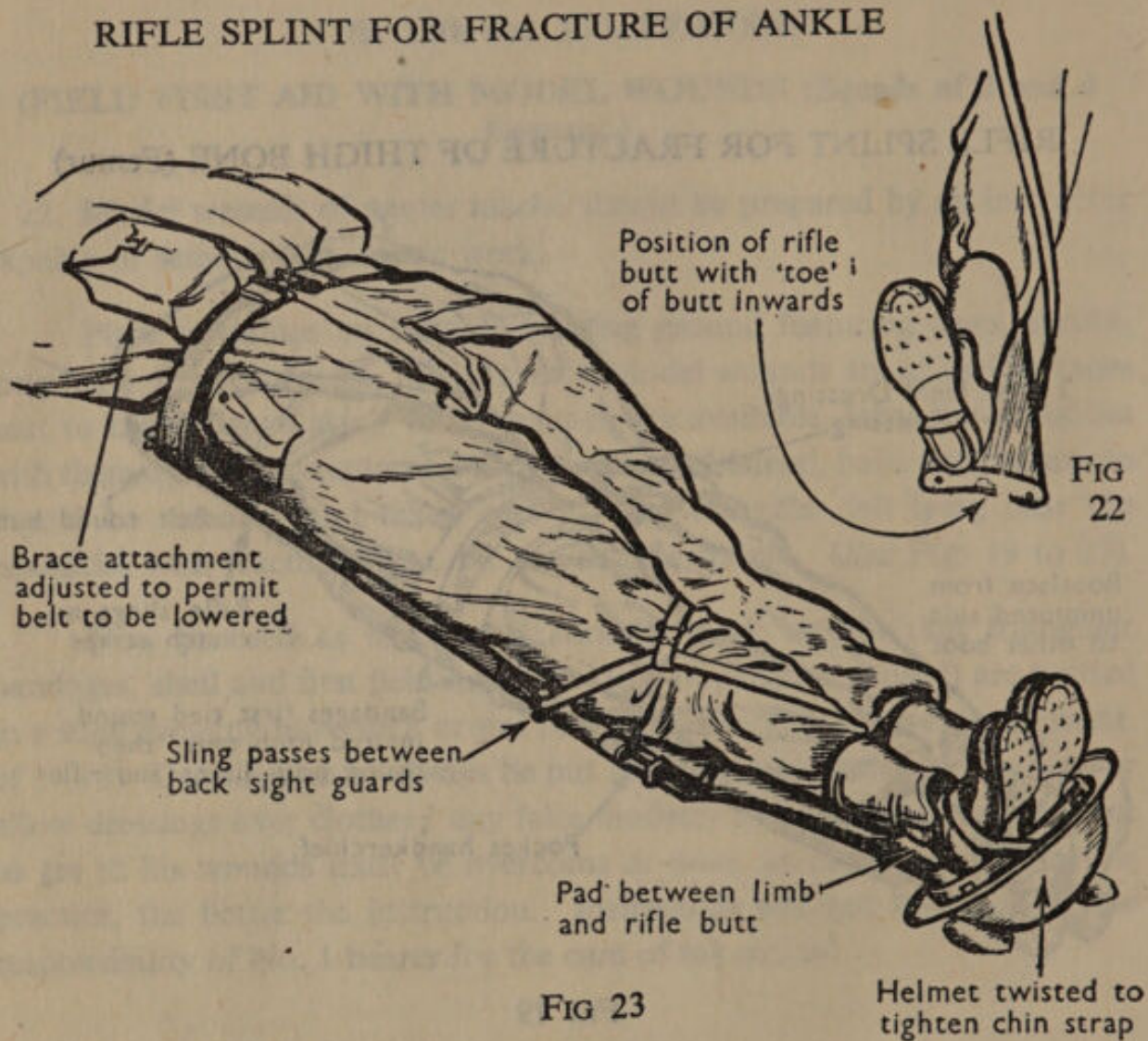
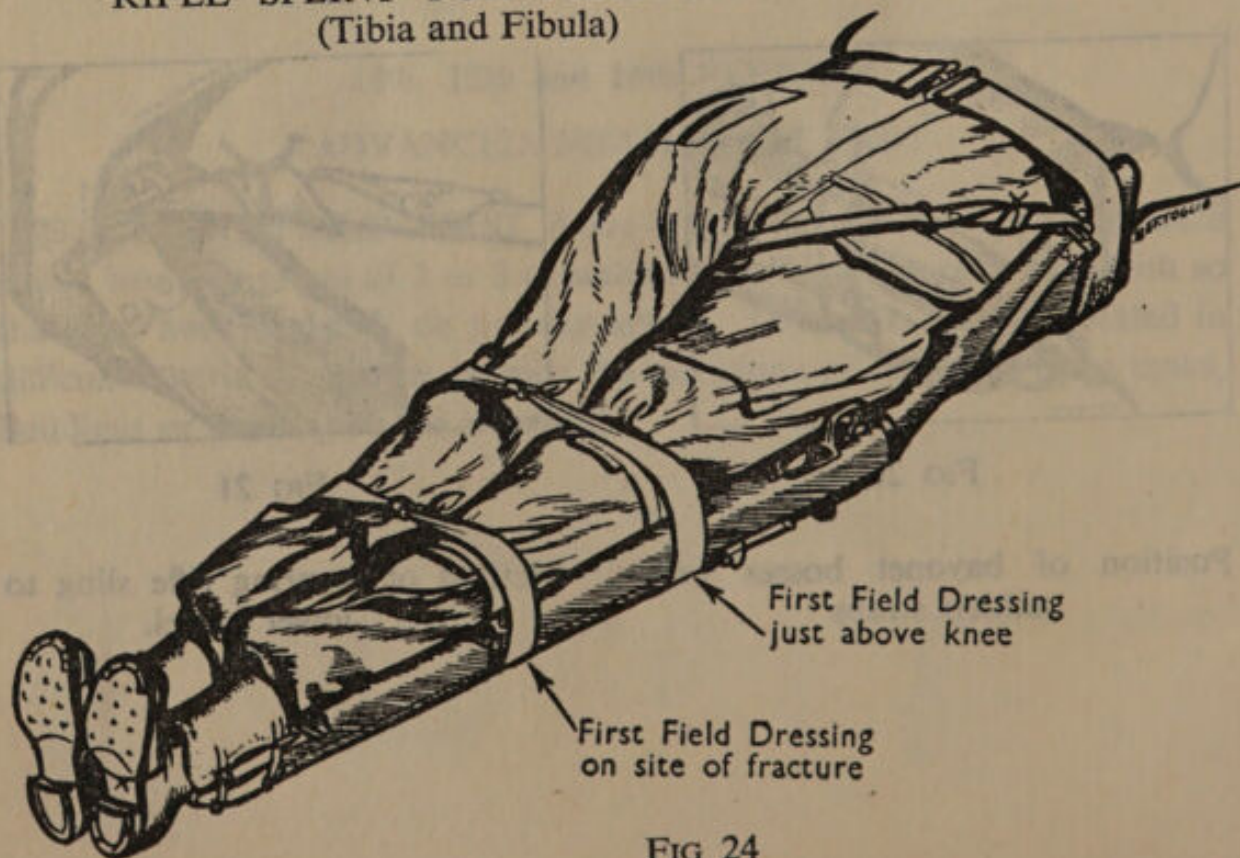


FIG 21

Method of securing rifle sling to lower swivel.

RIFLE SPLINT FOR FRACTURE OF ANKLE

RIFLE SPLINT FOR FRACTURE OF LEG BONES
(Tibia and Fibula)

IMPROVISED SLING FOR FRACTURED COLLAR BONE (Clavicle)

Using one pair of anklets, a rifle sling and boot laces, or string or pull through



FIG 25



FIG 26

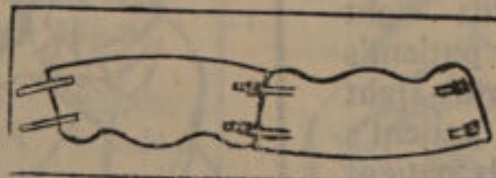


FIG 27

CHAPTER 5

PURPOSEFUL PHYSICAL TRAINING FOR STRETCHER BEARERS

General

24. The following demonstrates a method of combining physical training and a system of carrying casualties. These exercises should be incorporated into the periods of physical training which normally form part of the training for all RAMC personnel.

Fireman's Lift and Carry

25. If only one stretcher bearer is available, the method shown in Figs 28, 29 and 30 is of particular value for lifting and carrying a conscious patient who is unable to walk.

METHOD

- (a) Help casualty to upright position and stand on uninjured leg.
- (b) Bearer grasps patient's right wrist with left hand as shown in Fig 28.



FIG 28

- (c) Stretcher bearer bends down, putting his right shoulder into patient's lower abdomen with right arm between patient's legs and then pulls patient over his shoulder as shown in Fig 29.



FIG 29

- (d) Stretcher bearer stands up and transfers patient's right wrist to his own right hand and so leaves left hand free. Stretcher bearer carries patient a distance of 20 yards. Fig 30.



FIG 30

Back Lift and Carry

26. Patient must be conscious and able to stand on one leg if there is only one stretcher bearer.

METHOD

- (a) Help patient to stand on good leg.
- (b) Stretcher bearer takes up position back to back and gets patient to stretch out his arms sideways. Fig 31.
- (c) Stretcher bearer bends down, puts his hands under patient's arms, and grips patient's upper arms as shown in Fig 31.



FIG 31

- (d) Stretcher bearer bends forward, pulling patient on to his back, straightens his legs and carries him as shown in Fig 32 for a distance of 20 yards. Fig 32.



FIG 32

Neck drag

27. Useful method when unconscious patient has to be extracted from dangerous or restricted position by one stretcher bearer.

METHOD

- (a) Roll patient on to his back.
 (b) Tie patient's wrists firmly with handkerchief or rope, as shown in Fig 33.



FIG 33

- (c) Stretcher bearer quickly takes up position kneeling astride him, and pulls patient's arms over his own head and takes weight of patient's trunk on his neck. Fig 34.
 (d) Stretcher bearer then crawls away, pulling patient along with him for a distance of five yards.



FIG 34

Double sling drag

28. Two stretcher slings are joined to make one loop, as shown in Fig 35.

METHOD

- (a) Stretcher bearer crawls to patient who is lying on his back.
- (b) Stretcher bearer then passes a loop of the sling over patient's head and works it into position across patient's chest and under his arm pits.

He then crosses the sling strap under the patient's head, as shown in Fig 36.

- (c) Stretcher bearer turns round and lies on his abdomen slightly to the patient's left. He then puts the other loop of the sling over his right shoulder and drags patient a distance of five yards. Fig 37.

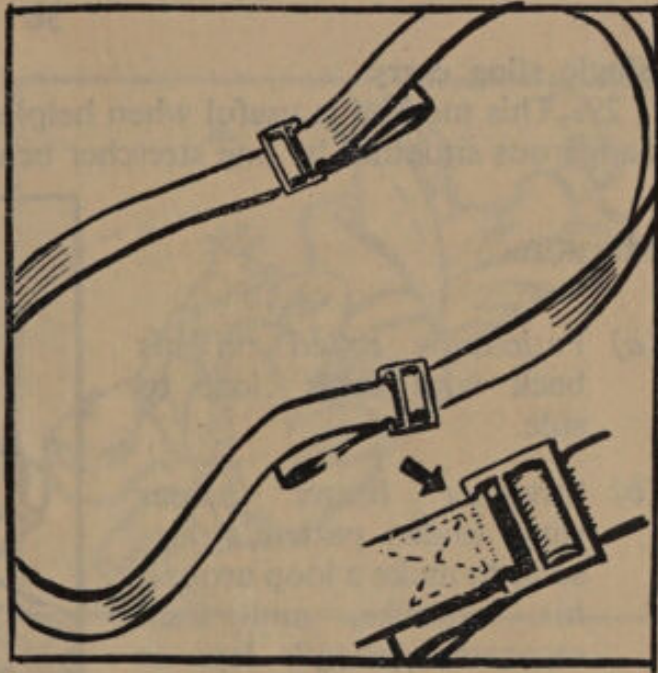


FIG 35



FIG 36



v. J. B.

FIG 37

Single sling carry

29. This method is useful when helpless patient has to be extracted from dangerous situation by one stretcher bearer.

METHOD

- (a) Patient is rolled on his back with arms close to side.
- (b) Stretcher bearer passes sling under patient's legs so as to make a loop around his buttocks, and then separates patient's legs as shown in Fig 38.



FIG 38

- (c) Stretcher bearer sits between the patient's legs and with his back to the patient, places his left arm and head through sling loop so that the loop passes over his right shoulder as shown in Fig 39.



FIG 39

- (d) Stretcher bearer lifts patient's right leg over his own and then grips patient's right wrist with his right hand and pulls patient's arm over his right shoulder as shown in Fig 40.



FIG 40



FIG 41



FIG 42

- (f) Stretcher bearer kneels and then stands up with patient supported in the sling. He then carries the patient a distance of 10 yards. Fig 43.



FIG 43

Two-hand carry

30. METHOD

- (a) Patient is raised and supported in upright position by two stretcher bearers, who then put their front arms behind patient's thigh and grip wrists as shown in Fig 44.



FIG 44

- (b) Patient then sits on their front arms while stretcher bearers grip each other's back arms behind patient's mid-dorsal region, as shown in Figs 45 and 46. If patient is conscious he holds stretcher bearers' shoulders.



FIG 45

- (c) Stretcher bearers carry patient a distance of 20 yards. Fig 46.



FIG 46

Four-hand carry

21. The patient must be conscious. Method involves two stretcher bearers.

METHOD

- (a) The stretcher bearers grip each other's wrists as shown in Fig 47.



FIG 47

- (b) Stretcher bearers get patient to lower himself on to the hand seat and to steady himself by placing his arms around their shoulders.

They then carry patient 20 yards. Fig 48.



FIG 48

Figure of eight carry

32. This method is of use when two stretcher bearers are at hand, and two stretcher slings available.

METHOD

- (a) The slings are joined to make one long loop which is crossed to form a figure of eight.
- (b) The cross over of the loop is placed so that one of the patient's legs passes through each loop, as shown in Fig 49.



FIG 49

- (c) Stretcher bearers put loops over their right and left shoulders and raise patient. They then carry him 20 yards. Fig 50.



FIG 50

Fore and aft lift and carry

33. This method is suitable for conscious or unconscious patients, but two stretcher bearers are required.

METHOD

- (a) One stretcher bearer separates patient's legs, then stands between them and bends down and grasps patient under the knees. Fig 51.



FIG 51

- (b) The other stretcher bearer takes up position behind the patient, and after raising his trunk passes his hands under the patient's arm pits and grasps his wrists. Fig 52.



FIG 52

- (c) Stretcher bearers then lift patient simultaneously and carry him 20 yards, as shown in Fig 53.



FIG 53

Fig 54.—Stretcher Ambulance Mk II—with Mattress, Table, Kit-sling, Backrest and legs to convert it to a useful bed.

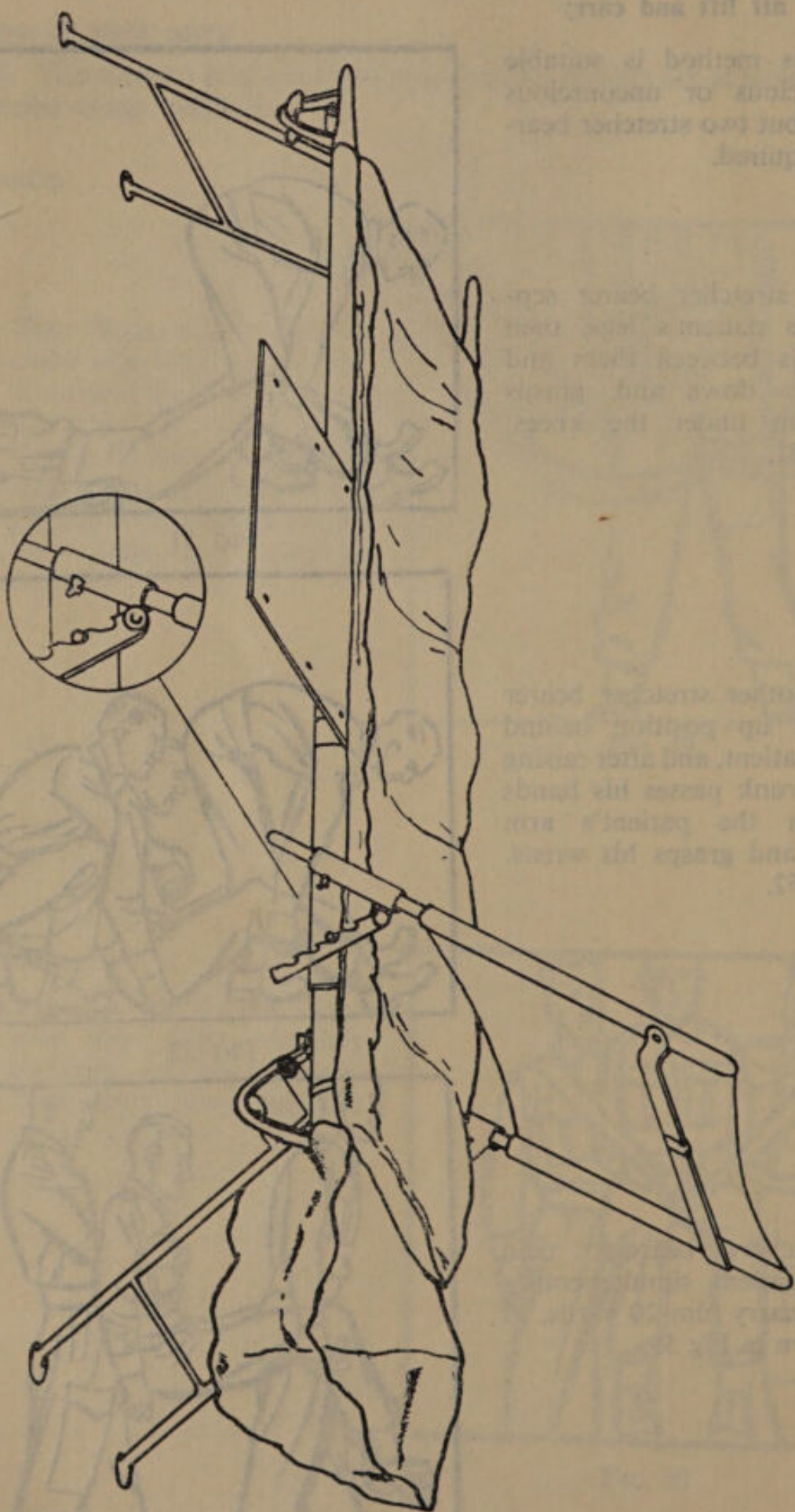


Fig 55

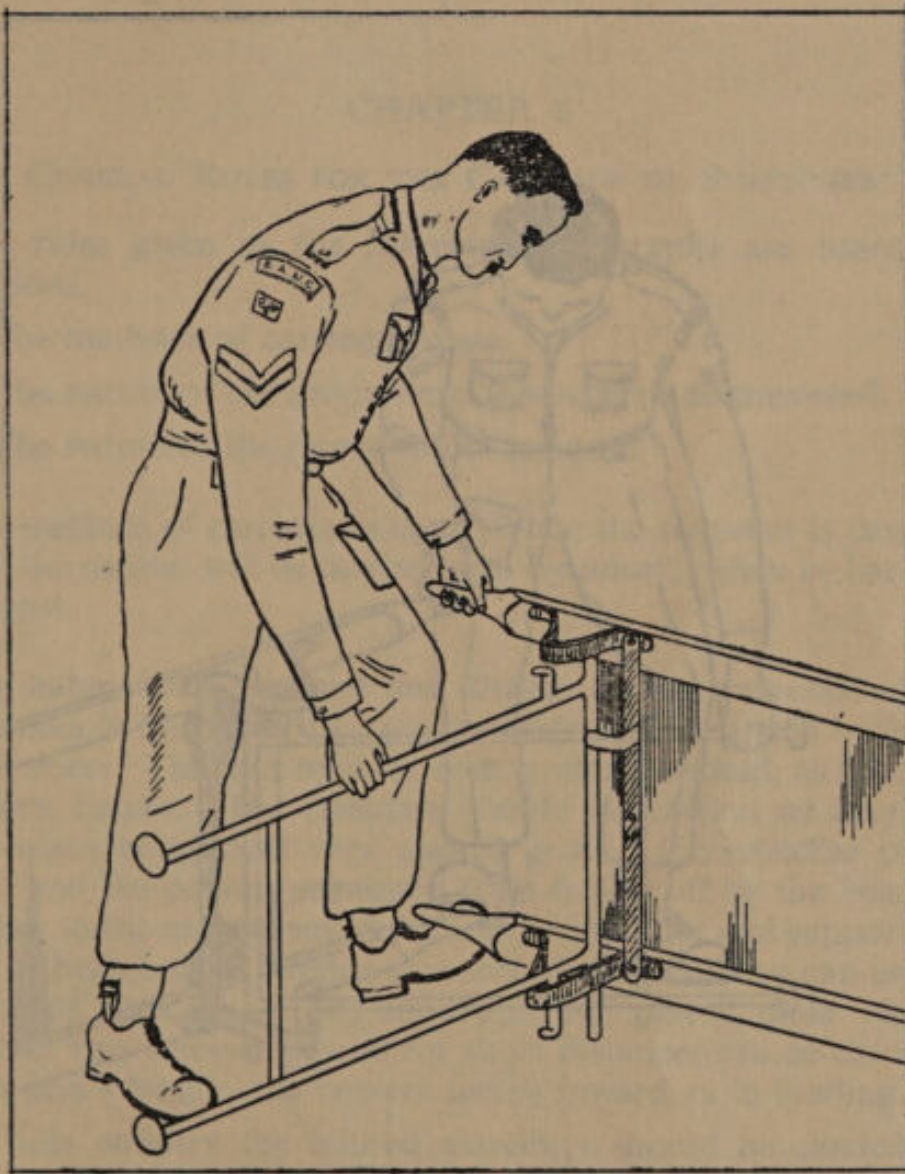


FIG 56

Open the stretcher and place it on to its side. Lift the stretcher by means of the top handle and place the lower handle on the toe of the boot. Insert bottom end of stretcher leg into the runner.

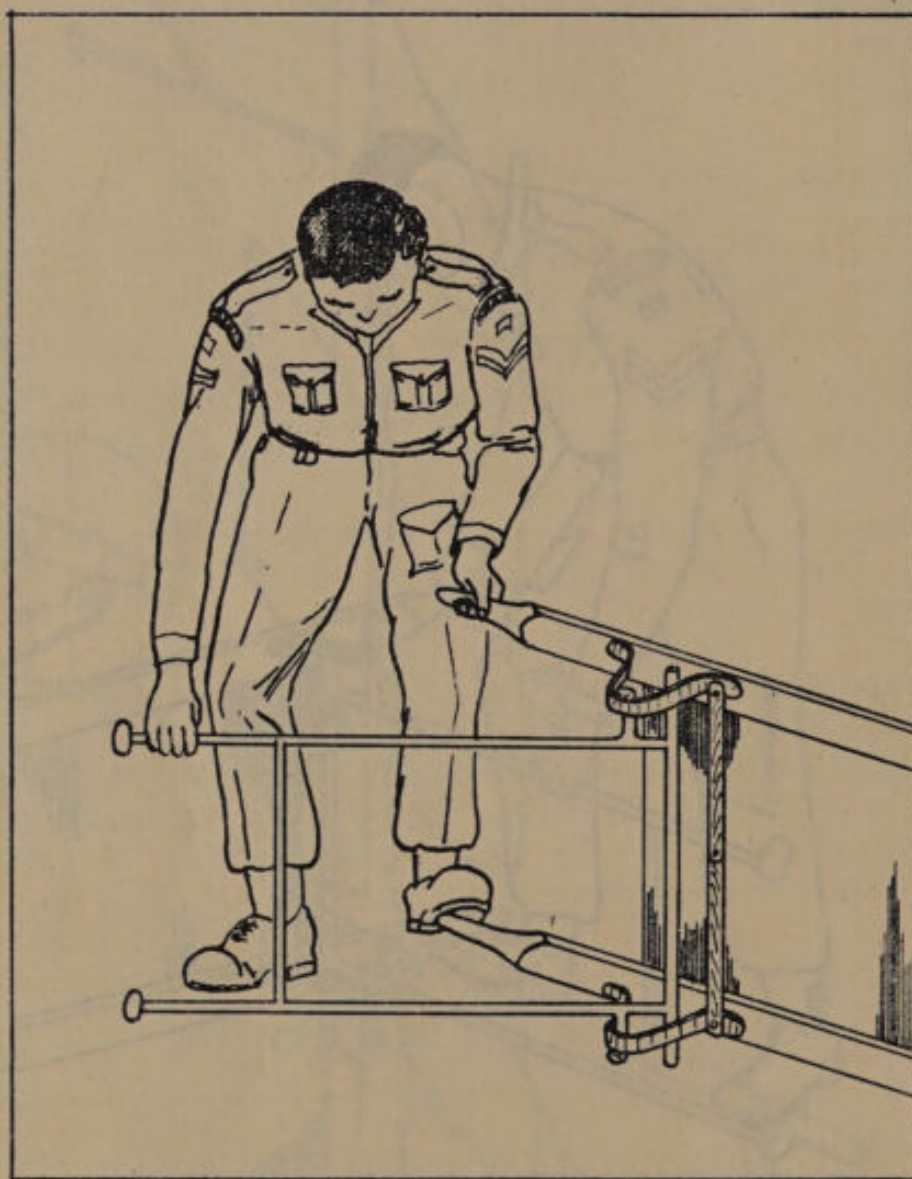


FIG 57

Withdraw the boot so that the stretcher rests on the floor. Insert the top end of stretcher leg into runner. Twist outwards to grip, repeat for second leg and turn stretcher on to its legs.

34. A stretcher may be converted into a useful bed in the field by fitting it with a mattress, small side-table, kit sling, back rest and legs (Fig 54).

The method of filling the backrest is shown in Fig 55; the legs are fitted as shown in Figs 56 and 57.

CHAPTER 6

GENERAL RULES FOR THE CARRIAGE OF STRETCHERS

35. The rules given in the following paragraphs are based on three considerations.

- (a) The methods of carriage in use.
- (b) The nature of the ground and distance to be traversed.
- (c) The nature of the injury to the patient.

36. **The methods of carriage in use.**—When the stretcher is carried on the shoulders, the patient will be carried head foremost; when by hand carriage, feet foremost.

37. **The nature of the ground and distance to be traversed.**—Except for short distances in hospitals, etc., the stretcher will be carried by four bearers on the shoulders. The four men for each stretcher should, as far as possible, be the same height. The stretcher should be carried as nearly level as possible—when going over very uneven ground the stretcher can be kept horizontal and the patient prevented from falling off by the bearers raising the stretcher to the extent required from the shoulder and supporting it with the outer or both hands. Undue soreness of the shoulders can be prevented by the use of pads, *eg*, empty sandbags, etc, placed under the shoulder straps. Over very uneven ground for short distances can be carried by four bearers at arm's length, the bearers facing inward as in loading wagons.

In hilly country the injured extremity should be carried as far as possible at a higher level than the uninjured, *eg*, a patient with *head injuries* should be carried head first up a hill ; one with a *fracture or wound of the lower limb* head first down hill.

38. **Crossing a wall or fence.**—No attempt should be made to carry a patient over a wall or fence if it can be avoided. Even if it involves a longer carry, a gap should be sought. If a gap is not available, the front handles of the stretcher should be rested on the wall or fence and the stretcher maintained in a level position by the bearers in rear, the remaining bearers crossing the wall. All bearers lifting together, the stretcher is moved forward until the rear handles can be rested on the wall and maintained level by the bearers in front. The rear bearers then cross the wall and the carriage of the stretcher is resumed.

39. *Crossing a ditch.*—On arrival at a ditch, the stretcher will be lowered as near the edge as possible. The two bearers at the front end of the stretcher descend into the ditch. All four bearers, lifting together, move the stretcher forward until the rear handles can be rested on the near edge of the ditch. The rear bearers now enter the ditch. Again all working together, the stretcher is lifted until the front handles are resting on the far side. By similar movements the stretcher is lifted out of the ditch on the far side and the march is resumed.

40. *The nature of the injury to the patient.*—The position of the patient on the stretcher often depends on the location of the wound or injury, but generally speaking he will be placed on his back with his equipment or any handy substitute used to raise his head slightly.

The following types of wound or injury require special positions

- (a) *Head.*—Care must be taken that the patient is so placed that the injured part does not press against the stretcher. Patients suffering from severe injuries to the mouth and lower part of the face may require to be carried face downwards with the head hanging over the end of the stretcher to prevent the danger of suffocation due to loss of control of the tongue.
- (b) *Lower limbs.*—The patient should be laid on his back, inclined towards the injured side, this position being less liable than others to cause motion of the injured limb during transport. A patient fitted with a Thomas splint will, however, be placed on his back and not inclined to the injured side.
- (c) *Upper limbs.*—If it is necessary to place the patient in a lying down position, he should be placed on his back or on the uninjured side as, in case of fracture, there is thus less liability of displacement of bone during transport.
- (d) *Chest.*—As there is often difficulty in breathing in such cases, patient should be placed with the chest well raised, his body being inclined towards the injured side.
- (e) *Abdomen.*—The patient should be placed on his back and the abdominal wall relaxed by flexing the knees over a pack or similar article.
- (f) *Spinal column.*—In all cases of fracture of the spine, the patient must be transported on his back. If found in any other position, he must slowly and evenly be rolled on to his back, with the greatest possible care and using all available assistance. He must not be bent, twisted or over-extended at the site of the injury. Pads should be placed to support the neck and the small of the back. Pads should also be placed on either side of the head.

CHAPTER 7

STRETCHER EXERCISES FOR GAS WARFARE

41. General Instructions

- (a) These exercises will not be taught until bearers are efficient in the adjustment of anti-gas clothing and equipment and in Stretcher Exercises as laid down in paras 10 to 20.
- (b) Stretcher exercises as previously described will be practised with patients labelled to indicate:—
 - (i) Wounds which will not interfere with the adjustment of the respirator.
 - (ii) Wounds which will interfere with the adjustment of the respirator, *ie*,—
 - (i) head wounds;
 - (ii) chest or abdominal wounds.
 - (iii) Gas casualties.
 - (iv) Contaminated clothing or equipment in addition to (i), (ii) or (iii) above.
- (c) The instructor will indicate gassed areas or gas attacks.
- (d) Bearers will wear steel helmets and the authorized anti-gas clothing and equipment. Respirators will be in the "Alert" position.
- (e) Bearers will be instructed as to the urgency of protecting themselves and patients against gas or contaminated material and of preventing the contamination of stretchers, blankets, etc. Contaminated gloves should be removed as soon as possible and the hands should be cleansed with anti-gas ointment before clean gloves are worn.
- (f) No. 1 bearer will be responsible for the gas protection of the patient and, if gas is present, will ensure that the patient obtains immediate gas protection. No. 3 bearer will render first aid. When a patient's respirator is adjusted for gas, his collar and the top button of his jacket will be opened.
- (g) Respirators will be adjusted immediately gas is detected. If on the move, squads will halt and lower the stretcher before respirators are adjusted. Words of command will not be given. When possible, squads will, without delay, carry patients out of the gassed area.

When facepieces are worn, a patient's condition may be observed by examining:—

 - (i) The colour of his ear.
 - (ii) The movement of his chest and the breathing sounds as heard at the outlet valve.
 - (iii) The pulse as felt at the wrist.

Instructions for loading stretchers in Gas Warfare

42. On reaching the patient the squad will proceed as follows:—

(a) IF GAS IS PRESENT.—Respirators will be adjusted.

(b) IF GAS IS NOT PRESENT:—

(i) *When the patient is unable to adjust his facepiece.*

No. 1 bearer will adjust the patient's facepiece. The patient will continue to wear his facepiece while he is exposed to the risk of gas attack.

(ii) *When the patient is able to adjust his facepiece.*

No. 1 bearer will remove the patient's facepiece from the haversack and place it on the patient's chest so that he can rapidly obtain protection against gas.

(c) WHEN THE PATIENT'S CLOTHING OR EQUIPMENT IS CONTAMINATED BY BLISTER GAS.

(i) No. 1 bearer will examine the patient and decide how far it is essential to remove clothing or cut out areas.

Patients should not be exposed unnecessarily to weather conditions which may increase the danger of shock.

(ii) Nos. 1 and 3 bearers will remove the contaminated areas of clothing or equipment and apply anti-gas ointment.

(iii) No. 2 bearer will cover the stretcher with the additional anti-gas cape and so protect it from contamination by the patient's clothing or equipment.

(iv) The patient will be placed on the stretcher.

(v) No. 2 bearer will cover the patient and his equipment with the patient's anti-gas cape.

(vi) No. 3 bearer will place contaminated clothing and equipment at the foot of the stretcher.

(d) SPECIAL CASES

(i) *Casualties suffering from wounds of the head.*—In many cases dressings can be held in position by the facepiece or head harness without interfering with gas protection. Unnecessary dressing or bandages will not be applied.

Should it be necessary to apply a dressing which must interfere with the adjustment of the respirator, the point of leakage should as far as possible be blocked by additional dressings outside the facepiece.

(ii) *Casualties suffering from wounds of the chest or abdomen.*—

Danger of suffocating from bleeding or vomiting may occur if a casualty is wearing a facepiece. The casualty should be carried on the stretcher with his head turned to one side and when necessary the facepiece and the patient's mouth should be cleared of obstruction.

Artificial respiration can be given with the facepiece adjusted, but it is essential to ensure that there is no obstruction inside the facepiece or mouth.

- (iii) *Casualties from choking gas.*—These casualties, if wearing respirators, will be carried in the same manner as those suffering from wounds of the chest or abdomen.

Instructions for unloading stretchers when the patient is contaminated

43. The stretcher will be lowered.

Contaminated clothing or equipment will be placed in the receptacles allotted for this purpose.

No. 1 bearer will be responsible for the patient's valuables and personal effects.

Nos. 2, 3 and 4 bearers will pass their hands between the stretcher and the anti-gas cape and lift the patient on to their knees with the assistance of No. 1 bearer.

CHAPTER 8

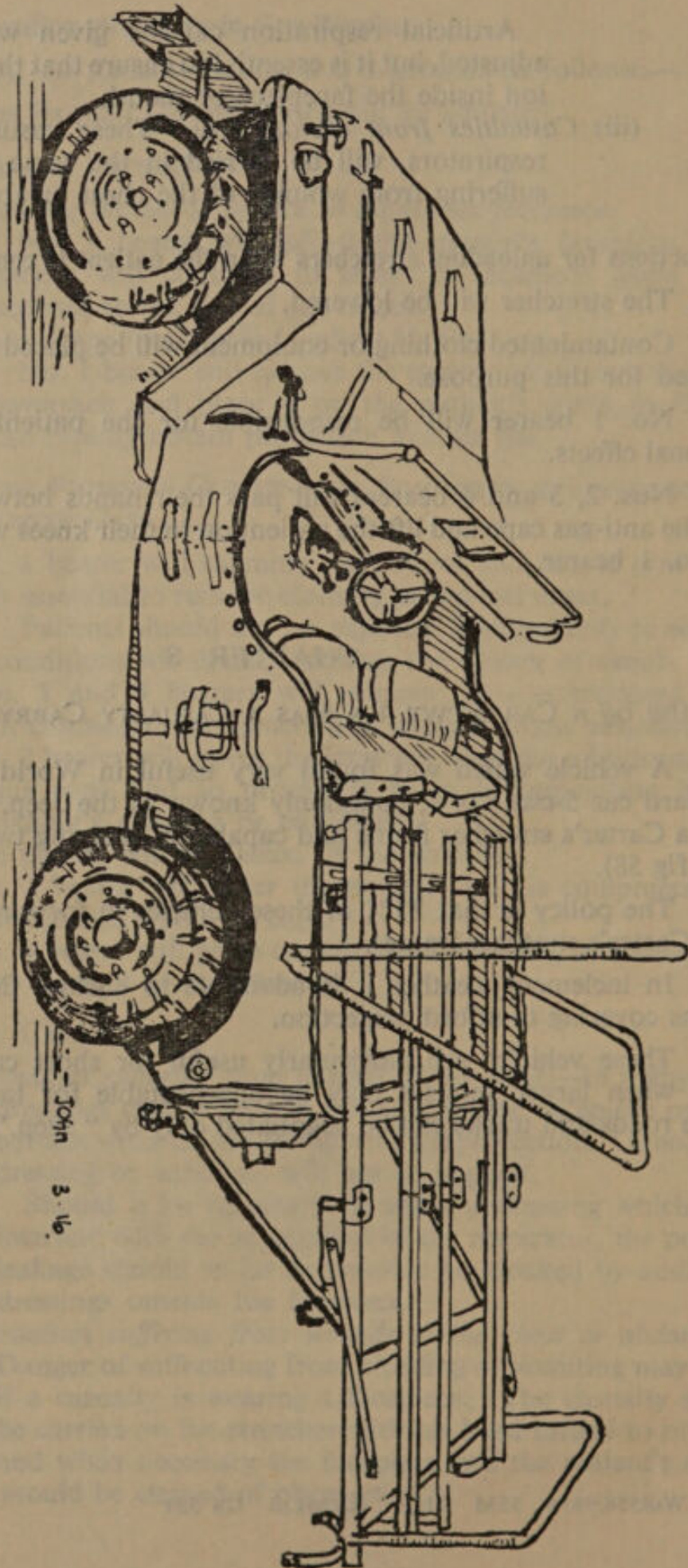
THE USE OF A CAR 5-CWT 4 x 4 AS A CASUALTY CARRYING VEHICLE

44. A vehicle which was found very useful in World War II was the standard car 5-cwt 4 x 4, commonly known as the Jeep, which was fitted with a Carter's stretcher frame and capable of carrying two stretcher cases. (See fig 58).

The policy is that 25% of these vehicles in forward areas are fitted with Carter's stretcher frames.

In inclement weather it is advisable to enclose the frame-work in canvas covering to afford protection.

These vehicles are particularly useful for short carries in forward areas when larger vehicles may be unacceptable for tactical reasons or where roads and tracks can be negotiated only by "Jeep."



John 3-16.

FIG. 58

CAR 4x4 FITTED WITH CARTERS STRETCHER FRAME



