

CHAPTER IX

Climbing Activities*

The ability to climb a rope or lower one's self on a line is essential to every one in the U. S. Navy. It may mean life, or, as past experience has proved, it may result in painful or permanent disability. The latter has happened in a number of cases where inability to lower the body has caused severe rope burn of the hands with resultant permanent disability (claw hands).

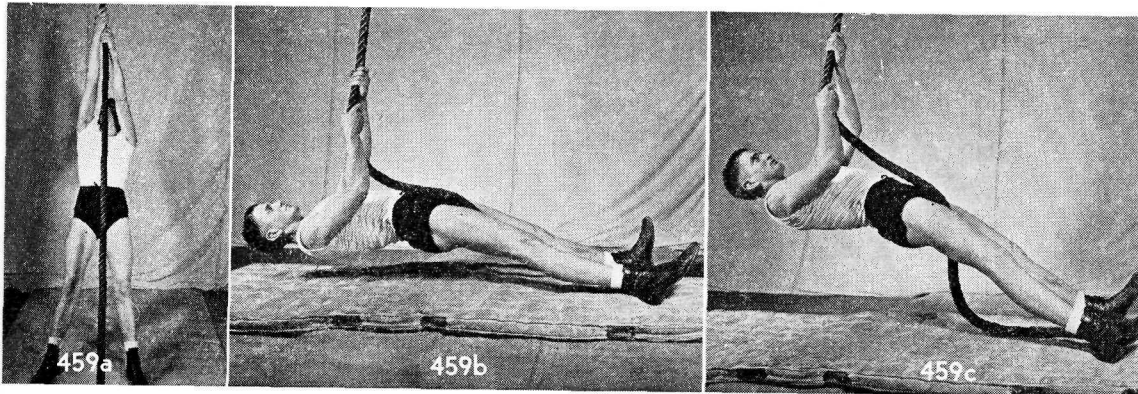
The cadet is instructed how to handle himself both with and without the use of the legs in climbing and lowering himself on a rope or line, and making fast in various ways. The effective use of the legs conserves energy in making long climbs and in climbing when fatigued. The various clamps, making fast and rest, together with the seat positions, are a means of securing to the rope for extended periods.

Preliminary Exercises.

To familiarize the cadet with the "feel" of the rope, and to have him appreciate the resultant stress of raising or lowering his body without the use of the legs, he is given a few preliminary exercises. These are as follows:

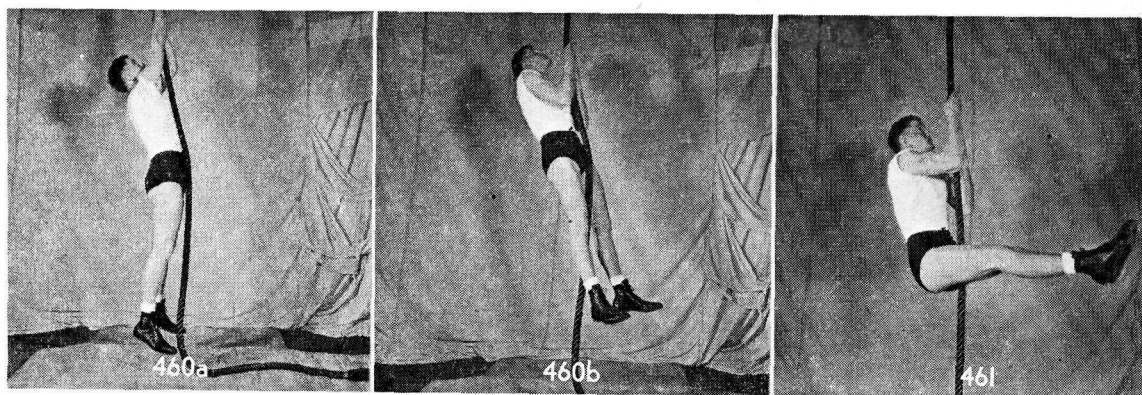
ROPES

Vertical Rope



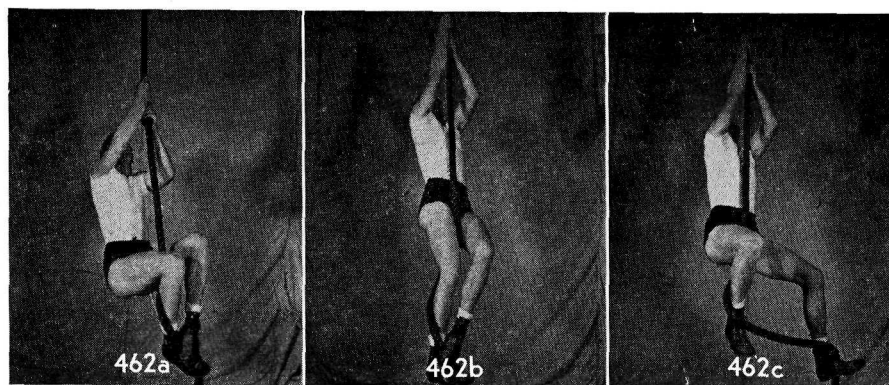
459—*Lower the Back to the Deck and Up.*—(a) Feet about fifteen inches apart—Grasp rope shoulder height—Keep body straight—Lower hand under hand—Keep body straight; (b) Touch back to deck; (c) Pull back to stand!

* Refer also to Rope Climbing in Syllabus.

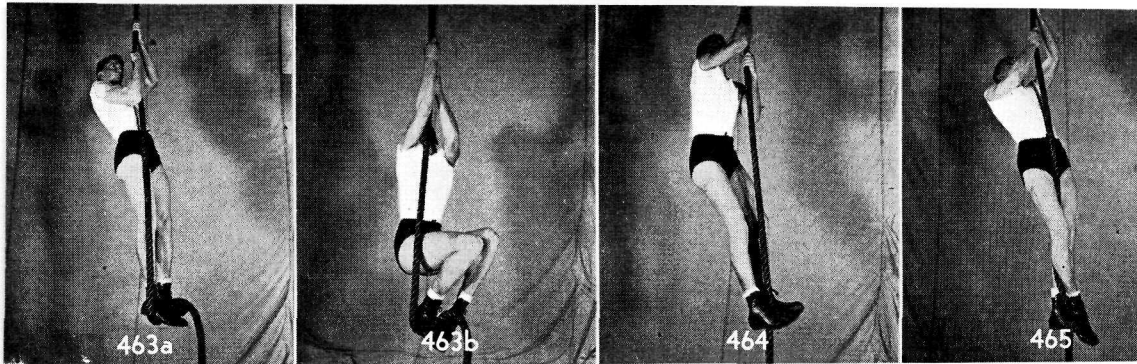


460—*Chin on Ropes*.—(a) Grasp rope high above head—Keep a tight grip; (b) From the hang, pull to a bent arm position and lower.

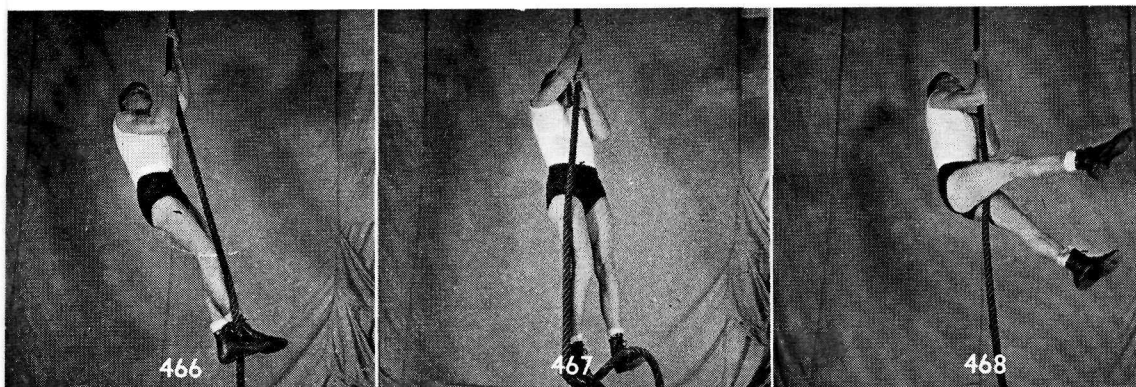
461—*Climb Down and Up*.—Start from stand-line running down mid-line of body—Reach high up and grasp line with both hands—Raise legs parallel to deck ($\frac{1}{2}$ lever)—Arms flexed—Lower hand under hand to the deck—Practice descending till able to raise legs clear of deck and able to climb upwards.



462—*Climbing the Rope Using Foot and Leg Lock*.—(a) Rope between legs and around the back of right leg—Rope then passes across instep of right foot—Left foot steps on rope across instep; (b) While holding with arms, flex knees—Make fast with foot clamp—Straighten legs and reach above with hands; (c) Take up the slack with left foot to aid in the climb and to eliminate rope burn.



- 463—*Climb the Rope Using Stirrup*.—(a) Rope passes along side of body—Rope passes under one foot and over other—Flex knees, bring legs high up as possible; (b) Close feet, clamp rope tight—Push rope with feet as body is brought into perpendicular position by leg extension—Reach upward with arms as high as possible and repeat.
- 464—*Descending Rope between Arches of Feet*.—Rope passes between arches of both feet—Legs straight, slightly bent at hips—Flex arms while descending.
- 465—*Cross Leg Climb (Shinny Up)*.—Start with hands over head—Legs overlap line—Rope passes down and over instep of one foot—Clamped to foot by back of ankle of other foot—By flexing and straightening knees, assist arms in climbing.

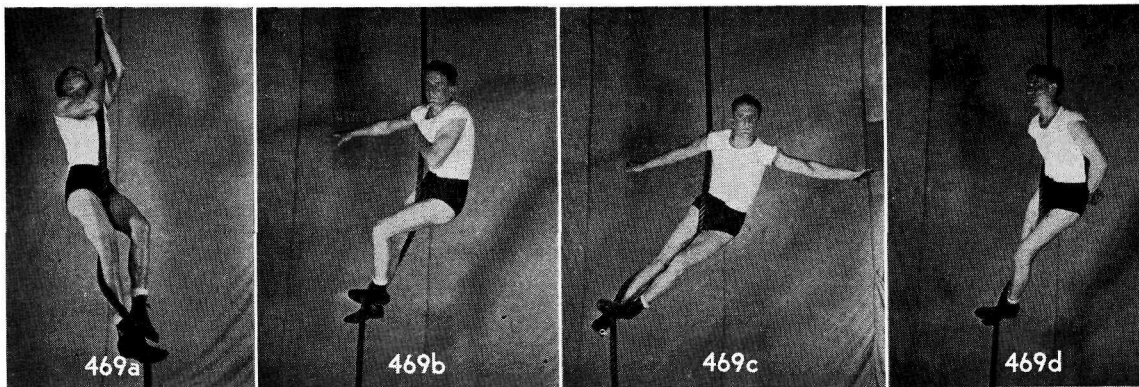


- 466—*Cross Leg Descend*.—Legs crossed in same fashion as above—Descend by either relaxing on foot grip or by flexing knees and alternating grip with hands and legs—Speed is regulated by amount of pressure applied by legs on rope.
- Cross Leg Secure*.—Make fast by gripping rope firmly with knees and feet.
- 467—*Descend Rope Using Stirrup*.—Rope passes down side of body—Rope passes under near foot and over instep of far foot—Open and close distance between feet to control speed of descent.
- 468—*Climb, Hands Only*.—Grip tightly—Shift weight from side to side—Kick with legs—Knees slightly flexed—Kick outward, in walking motion—Rotate shoulders with each stroke of arms—While arm and shoulder action are taking place the hips are rotating in the opposite direction.

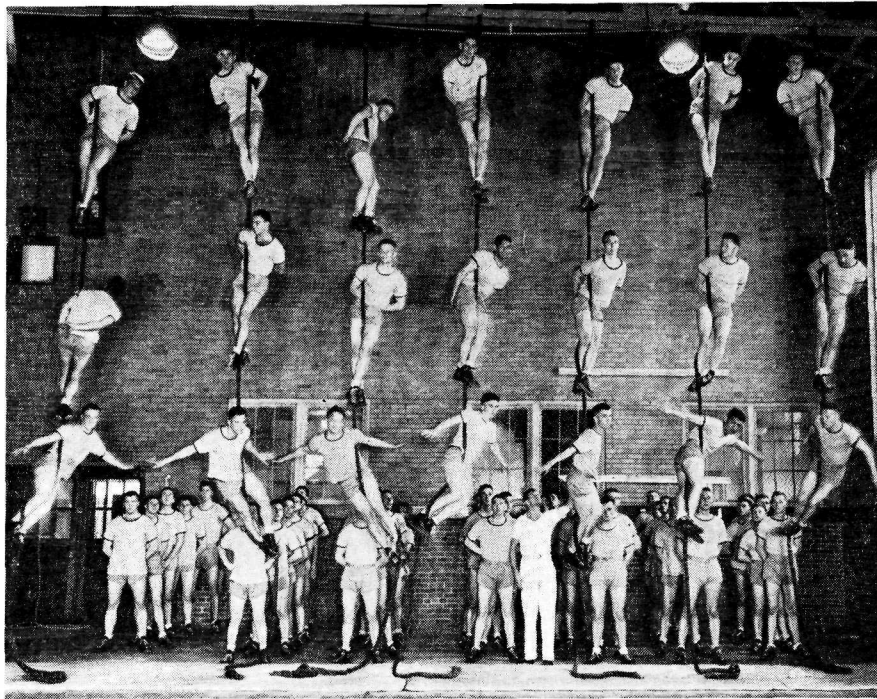
Any of the above climbs, descents, and secures can be used when only one man is on the line at a time. When more than one is on the line, the straight hand-over-hand and cross-leg climbs are recommended: In descending the cross-leg, rope between arches (instep squeezed), or straight hand-under-hand descent. When exhausted the leg around is advised in climbing, securing, and descending, but is difficult when more than one is on the line.

Make Fast and Rest

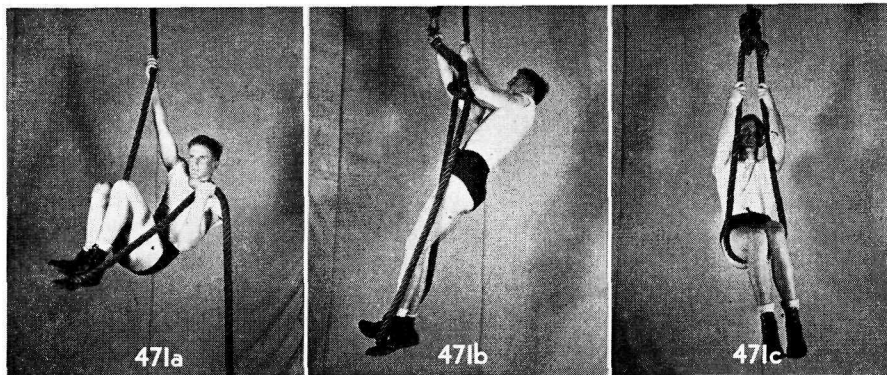
The "make fast" is usually used when it is desired to rest on a line. It is assumed that the line is midline of the body, passing between the legs around the right leg (for sake of illustration; either side will do) and over the dorsum (instep) of the right foot and held in place with the instep sole of the left foot on top of rope and right foot. The leg is fully extended and straight; the line is held against the body by the left hand, and the left hand is pressed into and on a level with the right axilla (armpit). The right arm is brought between the chin and the line on a horizontal plane, forward to outward-and-backward, bringing a backward traction on the line. When this is accomplished, the left hand is released and placed behind the back where it grasps the right wrist to maintain the backward traction on the line. The head is erect, chest out, in order to assure a large part of the body to be pressed against the line to facilitate the make fast rest. In coming away from "make fast," the left hand releases the right wrist, and grasps the line in front of the body at the right axilla (armpit), and then the right shoulder is released and the right hand also regrasps the line, and descent is made as previously described.



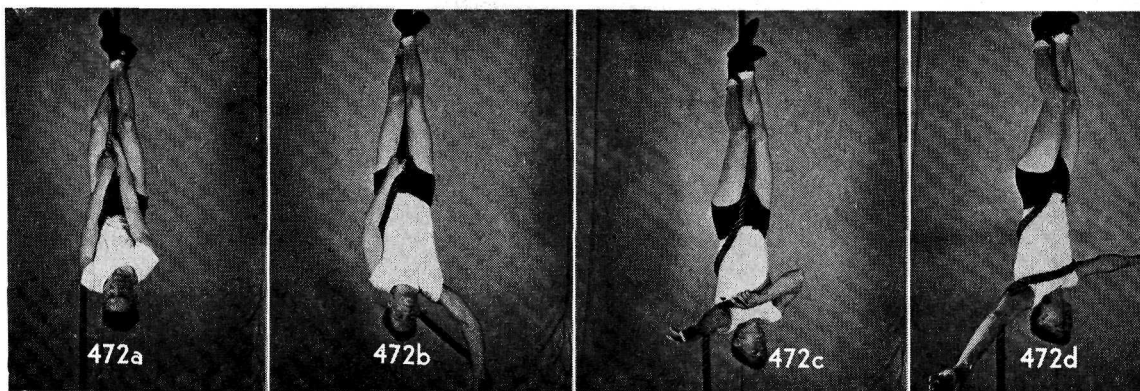
469—(a) Line is midline of the body—The line passes between the legs, around right leg and over the instep of the right foot—Press the sole of the left foot against the right instep; (b) Extend the right leg fully—Hold the line against the body with the left hand with the left hand pressed into the right armpit—Bring the right arm between the chin and a horizontal plane, forward to outward-and-backward—Bring a backward traction on the line; (c) Release the left hand—The legs will maintain the body on the line with a minimum of backward traction of the right arm; (d) Place the left hand behind back and grasp right wrist—Head erect, chest out!



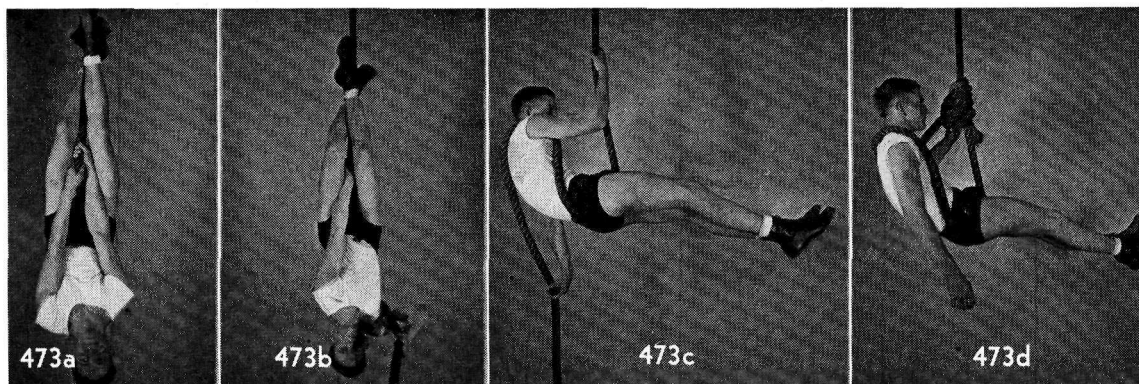
470—“*Make Fast and Rest.*”



471—*Stand and Seat Mount.*—(a) From a “make fast” position—Bend knees and bring rope up from below the clamp position; (b) Then straighten knees—Tie rope above making a loop; (c) Complete the seat mount!



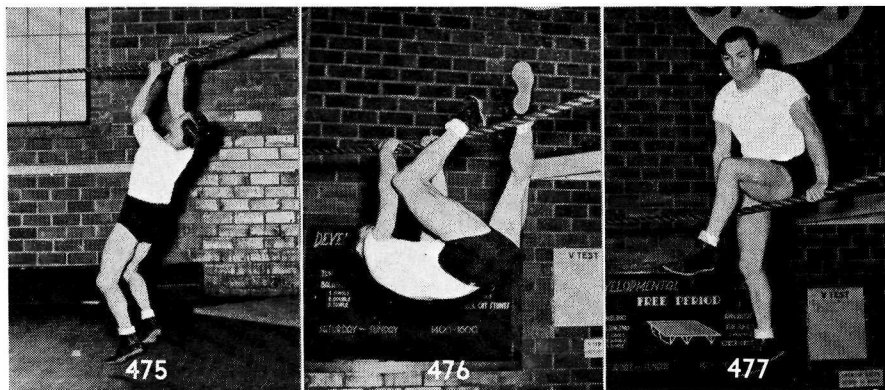
472—*The Inverted Hang, Make Fast and Rest.*—(a) Grasp rope above head—Swing legs aloft—One foot in front and one in back of rope; (b) Rest in inverted position—Right hand grasps line preliminary to passing across chest; (c) Rope passes under armpits and back and across chest; (d) Complete the inverted hand and rest!



473—*Rocking Chair.*—(a) Swing to an inverted position—Clamp rope with legs; (b) Bring free end up and under back and across chest—Over shoulder front to rear; (c) Wind rope around body under opposite armpit to line and secure; (d) Complete the Rocking Chair and rest!



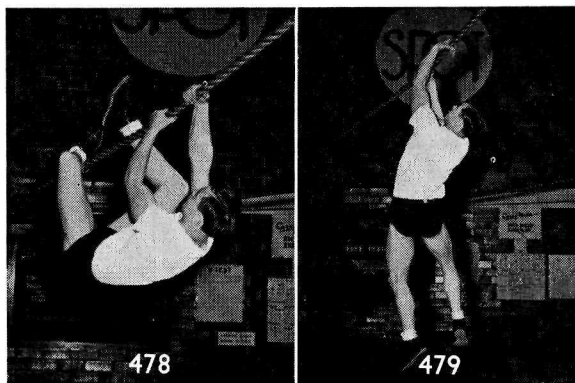
474—*Seats and Stirrups.*

Horizontal Rope

475—*Hand-over-Hand*.—Grasp tight—Flex arms—Kick with legs!

476—*Sloth Walk*.—Heels resting on rope—Knees well out to the side—Same leg as arm while moving!

477—*Side Straddle Seat (Upward Glide)*.—Grasp rope in combined grasp—Rope passes under thigh of one leg—Balance with legs!

Inclined Rope

478—*Variations*.—Sloth Walk—Heels resting on rope—Knees well out to the side—Same leg as arm while moving! Turn and descend—Work in opposite direction!

479—*Hand-over-Hand*.—Grasp tight—Flex arms—Kick with legs!

PROGRESSIVE ROPE ACTIVITIES

1. Grasp rope lying on floor, arm bending and stretching.
2. Grasp, stride standing, climbing downward hand under hand, upward hand over hand.

3. Make fast on floor; climb upward, hand over hand, and make fast.
4. Climb upward five (5) strides, climb downward two (2) strides, make fast.
5. Grasp, standing, raise legs to inverted hang.
6. Climb upward three strides, raise legs to inverted hang, lower legs and climb downward.
7. Climb upward four (4) strides, raise legs to inverted hang, lower legs and make fast, climb down.
8. Grasp, standing on two ropes, climb upward and downward.
9. Grasp, standing on two ropes, raise legs to inverted hang.
10. Lying supine on floor, grasp both ropes, arm bending and stretching.
11. Climb upward five (5) strides, raise legs to inverted hang, change hands and climb downward, head first.
12. Climb upward, hand over hand, for distance.
13. Grasp, standing on two ropes, climb upward, make fast and rest on one rope.
14. Grasp, standing on two ropes, climb upward, raise legs to inverted hang, lower legs and make fast on one rope.
15. Grasp, standing on two ropes, climbing upward for distance.
16. Grasp, standing on two ropes, climb upward about four feet, raise legs to inverted hang on one rope (both hands on one rope), lower legs and climb downward on one rope.
17. Climb upward on one rope (5) (strides), change one hand to other rope and climb downward on two ropes.
18. Work on horizontal and inclined ropes.

IMPORTANT!

Learn to Climb

Downward

as well as

Upward!

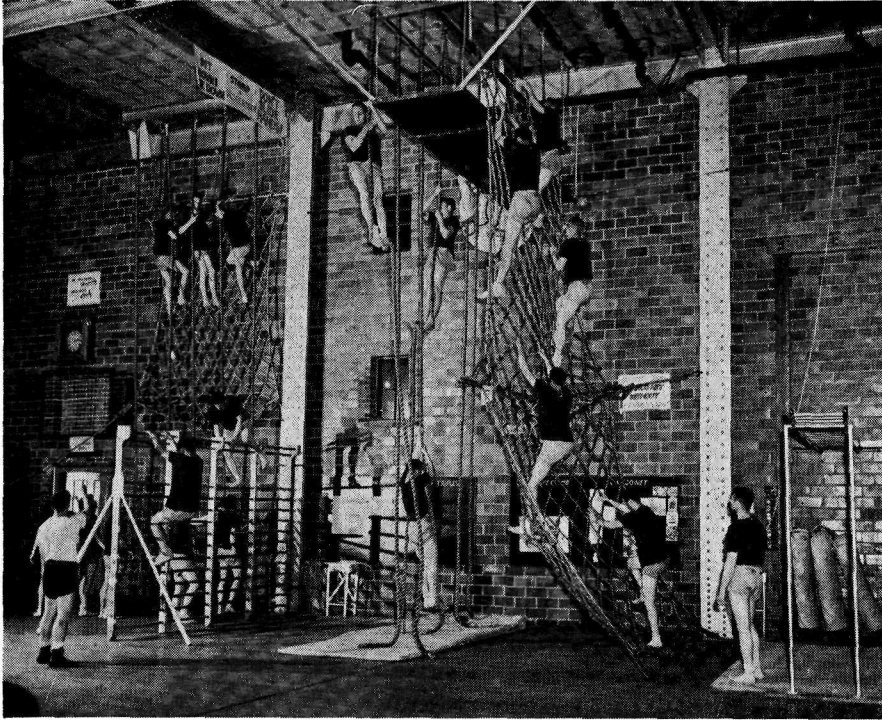


PLATE 480

CARGO NET

Rope climbing training may be supplemented to advantage if a cargo net is available. If installed, hazards should be reduced to a minimum as far as the average performer is concerned. (See Plate No. 480.) As a greater safety measure, the cargo net should be extended above the platform upon which the cadet mounts. It is also advisable to provide stays which the cadet may reach up and grasp when he is at the top of the cargo net, and which will assist him in lifting first one leg and then his body over the top of the cargo net. The nervous and unsteady feeling that is apt to exist when the platform is level with the top of the cargo net is removed when the cargo net extends up higher than the platform.

The platform should be set high enough to accommodate a six-foot individual and should be enclosed with a railing so that no cadet may fall off.



PLATE 481

Six ropes should be installed on the other side of the platform in order to provide practice in descending the ropes. (Plate No. 481.) To keep hazards at a minimum it is a good procedure to insist that the cadet sit down. In order to enforce the rule an angle-iron railing should be installed about waist high, thus providing a barrier so that the cadet cannot descend the rope from a standing position.

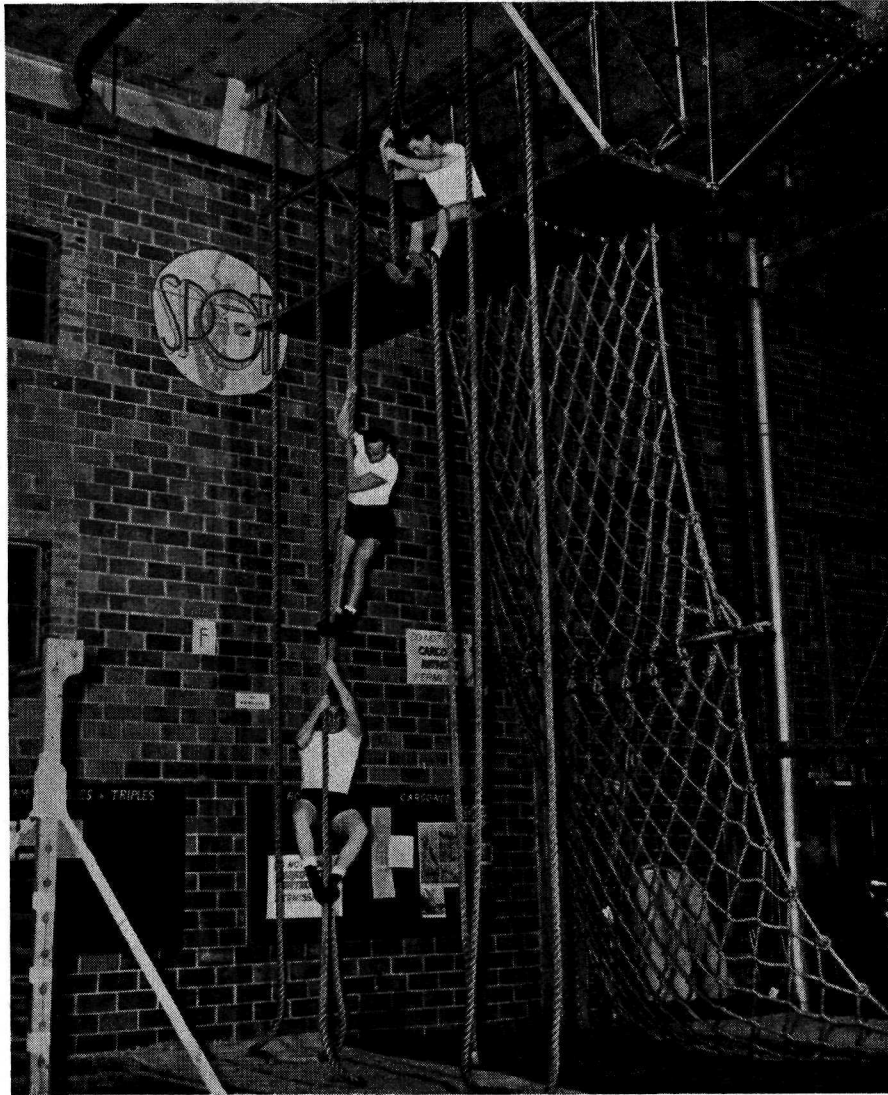


PLATE 482

From a sitting position on the edge of the platform, the stirrup is put on before taking off for the descent. (Plate No. 482.) The cadet is instructed to look down toward the feet and not to slide the hands. By looking downward, he will not hit the back of his head on the edge of the platform. This procedure should be followed in any type of rope climbing. When two or more men are on the rope at the same time, the stirrup cannot be put on; the descent is made by flexing



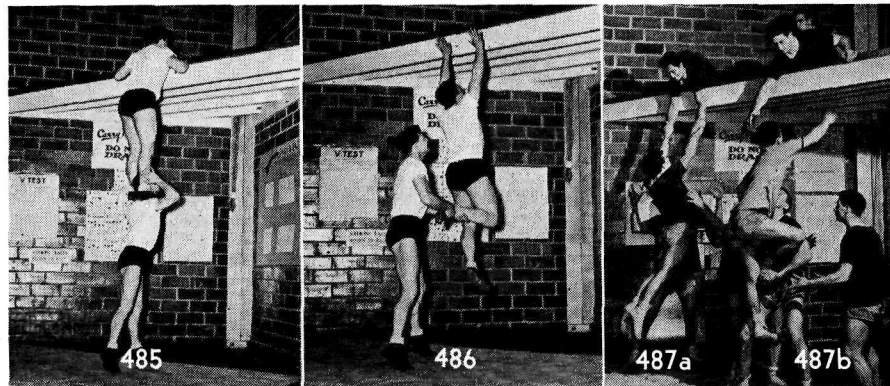
PLATE 483

slightly at the waist and pushing hard against the rope with the soles of the feet. (Plate No. 482.) Here again, the cadet must remember to look downward so that he does not interfere with the man below. This same procedure should be followed if the cargo net is installed against the bulkhead. (Plate No. 483.) Look upward when ascending! Look downward when descending!

CLIMBING SHELF

Singles

- 484—(a) *Hip Circle Mount*.—Reverse grasp—Lift hips over shelf before lifting head; (b) *Muscle Up Mount*.—Over grasp—Lean forward—Lift one elbow at a time; (c) *Single Leg Mount*.—Chin as high as possible—Throw one leg over shelf—Lift one elbow and kick with free leg!

Doubles

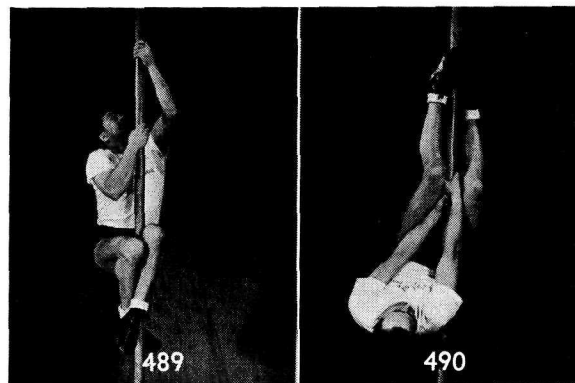
- 485—*Shoulder Stand Mount*.—Mount shoulders and complete climb with a muscle up or with a single leg mount!
 486—*Bent Knee Mount*.—Look upward—Get the timing for the lift—Follow through on lift!
 487—(a) *Pitch Mount*.—Look upward—Get the timing for the lift—Follow through on lift—Complete climb with muscle up or single leg mount; (b) *Assist Partner Up*.—Lean over shelf—Partner grasps wrists—Pull partner up until hands are level with shelf—Change hands one at a time—Complete climb with muscle up or single leg mount!

Dismounts

- 488—(a) *Hip Circle*.—Reverse grasp—Lean well over shelf—Turn over forward;
 (b) *Sit and Push Off*.—Lean slightly forward for the push off—Land on the balls of the feet; (c) *Half Turn to Hang*.—Grasp with both hands at the side of the hip—Turn toward that side to a bent arm hang—Dismount!

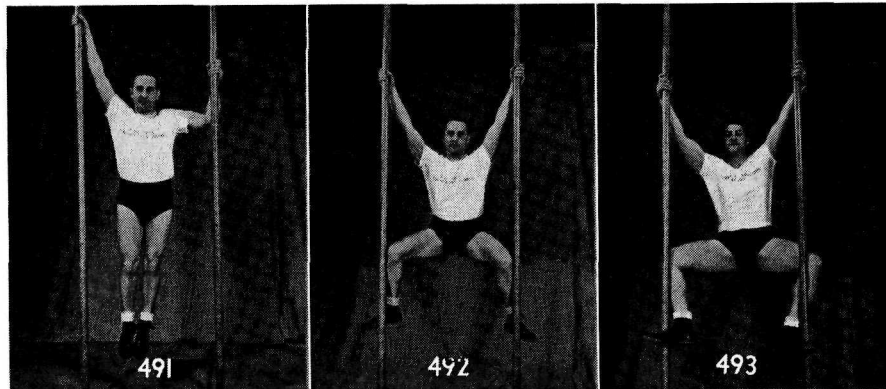
POLES*

Climbing poles are used to strengthen the upper body, arm, shoulder, back and abdominal muscles.

Climbing One Pole

- 489—*One Pole Climb*.—Knees are drawn up, feet around the pole—Hips can be straightened. Hands are free to reach upward hand over hand!
 490—*Inverted Climb*.—Feet close to pole—Climb hand over hand!

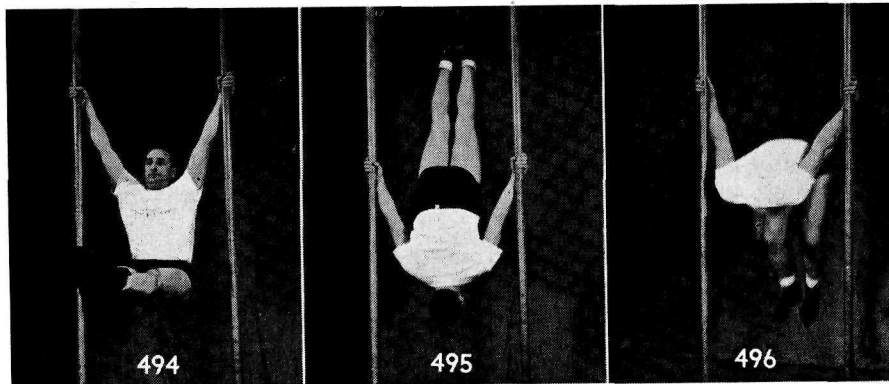
* See p. 283.

Climbing Two Poles

491—*Two Pole Climb*.—Climb by alternating left and right hand on pole. Weight is held by the arms—Feet are free!

492—*Knees Inside*.—Climb with knee inside. Feet outside!

493—*Knees Outside*.—Climb with knee outside. Feet inside!

Hangs on Two Pipes

494—*Half Lever*.—Hang with arms extended—Feet extend frontways from hips parallel to deck!

495—*Inverted Hang*.—Hang by hands—Feet extend upward—Head downward!

496—*Skin the Cat*.—From an inverted hang, bring feet down rearways and hang!