R.C.N.V.R.

# SEAMANSHIP POCKET MANUAL

S. 2440 5M-11-45 (2117) N.S. 7570—S. 2440 K.P. 50426 16428

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ESQ. 13 C

R.C.N.V.R.
SEAMANSHIP
POCKET
MANUAL



Issued by NAVAL SERVICE HEADQUARTERS

### FOREWORD

Though this little book is not to be regarded as a textbook, it is hoped that it will serve as a guide and a reminder of the basic principles of Seamanship. KEEP IT HANDY. You will find it useful.

### INSTRUCTIONS TO NEW ENTRIES

All new entries must study the barrack notice boards.

Ratings will obey all orders immediately and without questioning.

Smoking is strictly forbidden except at times and in spaces stated in orders.

Ratings are to pay respects to all officers on board and on shore whether naval, army, air force or women's services, and whether of own or foreign service.

All ratings, not in organized parties (which means not under the charge of an officer or rating), wearing head dress, stand at attention and salute when the National Anthem or any Foreign National Anthem is played. Inside a building when not wearing head dress, stand at attention.

Caps are to be worn properly at all times. (Including tallies.)

Tapes—Length of tapes is minimum of 5" with maximum of 6". Width of Black Silk Scarf is to be approximately 2". The ends of the scarf are to be stitched together in such a position as to form a loop of suitable size for the wearer. The scarf is to be passed under the collar at the back and is to be secured to the jumper in front by the tapes, which are to be tied in a bow over the scarf in such a manner as to leave a bight of the scarf of from 1" to 2" in length. The ends of the bow

in the tapes are to be of equal length and from 1½" to 2" long. Approximate "ready guages"—Bight of bow "2 fingers"; length of tapes "twice 3 fingers"; bight of scarf "3 fingers".

Gambling is not allowed in the service.

To approach an Officer for personal reasons ratings must first see a leading hand or Petty Officer who will present request to the Officer.

When in Doubt ask your Instructor or the R.P.O., Duty P.O. or Divisional Officer, as ignorance of the rules cannot be accepted as an excuse.

Clear Lower Deck includes everybody unless a rating has very definite orders to stand fast.

Expectorating on decks is a dirty habit and is strictly forbidden.

Haircuts—Hair is to be kept cut decently short. On no account should it be possible to pull hair down over the eyes, nor is clipping at sides and back sufficient. "Side-boards" are not allowed.

If ratings are taken sick whilst on shore

If ratings are taken sick whilst on shore they must see that their ship is notified as soon as possible; also notify the nearest naval ship or establishment.

as possible; also notify the nearest naval ship or establishment.

No animal is to be brought into the establishment without a request to do so first being

granted.

Leave breaking is a serious offence and is punishable by a set scale, namely for every three hours or part of three hours, one day's

pay and one day's leave are lost. So if a rating

is absent six hours and ten minutes, three days pay and three days leave will be lost. For periods of absence over 36 hours, one day's pay and one day's leave are forfeited for each 6 hours of absence. Maximum stopage of pay is 60 days.

Whistling is forbidden.

Ratings must not exchange messes, lockers or sleeping billets.

A rating should know the names of and be able to identify all officers in his ship. In large shore establishments it is sufficient for him to know the Captain, Executive Officer, Senior Training Officers and his own Divisional Officer.

All ratings must off caps before entering any Officers' or Petty Officers' mess.

All ratings in vicinity of rounds must stand to attention when "Still for rounds" is piped or sounded on a bugle.

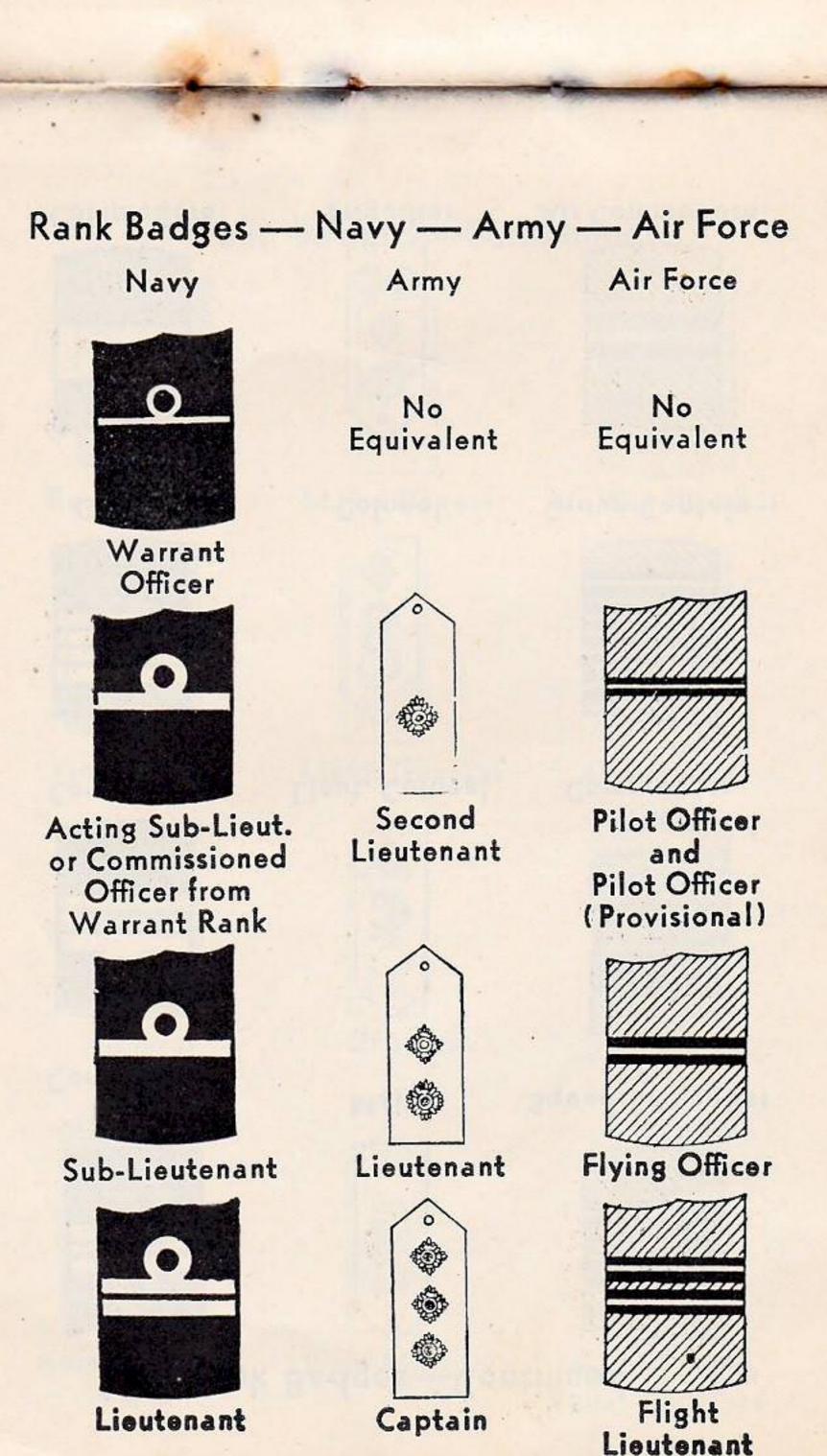
Ratings are not allowed to borrow, loan, or sell any issue gear, and must wear issue clothing at all times.

Any rating is entitled to complain providing he has a justifiable complaint to lodge.

No one man may lodge a complaint for a group. Each man is to submit his complaint individually.

Complaints are to be made to your Divisional Officer, through your Divisional Petty Officer in the first instance.

Frivolous complaints are punishable.



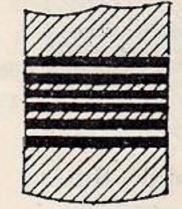
### Rank Badges—Continued



Lieut. Commander



Major



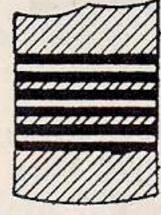
Squadron Leader



Commander



Lieut. Colonel



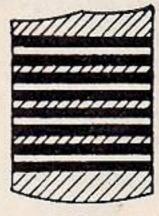
Wing Commander



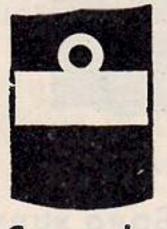
Captain



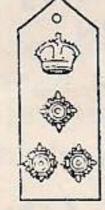
Colonel



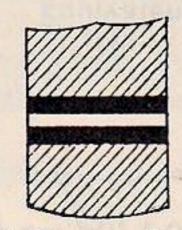
Group Captain



Commodore

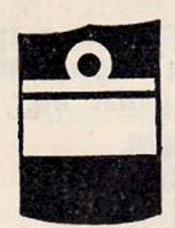


Brigadier



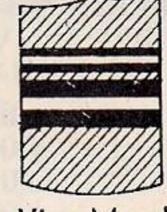
Air Commodore

### Rank Badges—Continued



Rear Admiral





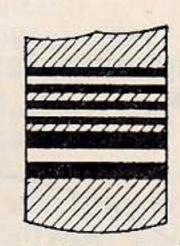
Major General Air Vice Marshal



Vice Admiral



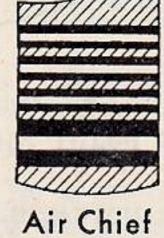
Lieut. General



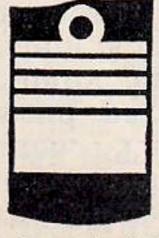
Air Marshal







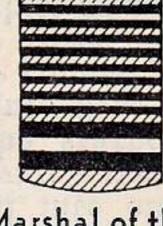
Marshal



Admiral of the

Fleet



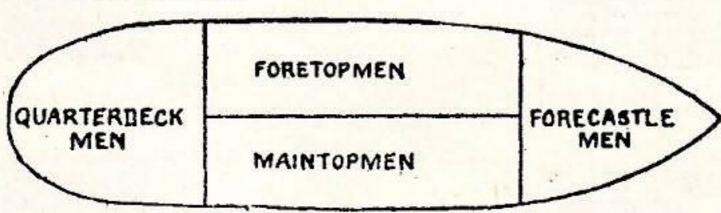


Marshal of the Royal Air Force

GENERAL SHIP ORGANIZATION, ETC.

The Ship's company is divided into either two or three watches. In the two-watch system, there is the port watch and the starboard watch. These are each divided into first and second parts so that the ship's company is actually in four watches. The three-watch system is more often used-red, white and blue watches. The ship is also divided into four sections or "Tops": Forecastle, Foretop, Maintop and Quarterdeck (see Sketch). There is an equal number of men from each watch and of the watch in each "Top."

Some ships are divided into only three sections or "Tops":-Forecastlemen, Topmen, Quarterdeckmen.



SHIP'S TIME

In the Navy, the "24-hour clock" is used and times are written as in the following examples:

1 a.m. is written 0100

2 a.m. is written 0200

8.30 a.m. is written 0830

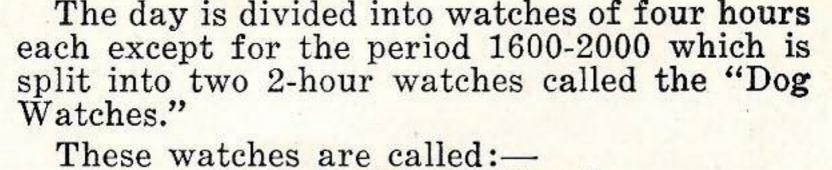
1 p.m. is written 1300

2 p.m. is written 1400

8.30 p.m. is written 2030

The word "hours" is never written in the Navy after time as is done in the Army and the Air Force, e.g., "1400 hours" is written "1400."

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0000-0400-Middle Watch

0400-0800-Morning Watch 0800-1200-Forenoon Watch 1200-1600-Afternoon Watch 1600-1800—First Dog Watch 1800-2000-Last Dog Watch 2000-2400—First Watch

These times are kept by a bell being struck every half-hour commencing with one at the first half-hour of the watch and ending with eight at the fourth hour of the watch, except in the Dog Watches, when at 1830 one bell is struck, at 1900 two bells, at 1930 three bells and at 2000 eight bells. LEAD AND LINE

### The lead and line is used for finding the

depth of the water under the ship or the "Soundings" as it is called.

The Lead is joined to the line by a piece of raw hide, and the bottom of the lead has a hollow in it which is filled with tallow before being used. This is called "Arming the lead," and is done so that the nature of the bottom of

the sea can be ascertained as well as the depth. of the water. Small amounts of sand, gravel

or mud stick to the tallow, and can be seen when the lead is hauled in. The Line is marked in fathoms (a fathom is

6 feet) at the following distances:-

- - 2 strips of leather. At 2 fathoms - - 3 strips of leather. At 3 fathoms

At 5 and 15 fathoms a piece of white Bunting.

At 7 and 17 fathoms a piece of red Bunting. - a piece of leather with a hole At 10 fathoms -

- a piece of blue Bunting. At 13 fathoms -

- - 2 knots. At 20 fathoms

These are called the "Marks" on the leadline and all fathoms not marked are called "Deeps."

The Lead and Line is worked by a seaman from a small platform sticking out from the side of the ship, and generally on each side of the Forecastle. This platform is known as the "Chains," and no seaman is allowed to take his turn of duty (or trick) in the "chains" until he has taken off his lanyard. This is so that the leadline cannot get entangled in his lanyard and choke him. The "Leadsman" or seaman in the "chains" then "heaves the lead" as follows:-

He first sees that the "apron" which prevents him from falling into the sea is properly fastened, and then coiling up the line so that it will run out clear without getting tangled, he lets the lead and about 2 to 21/4 fathoms of line hang down, taking a turn with the line round his hand. The rest of the coil he keeps in the other hand. Then facing the bows of the ship he swings the lead backwards and forwards two or three times and finally brings it right over his head in a circle. After two or three circles with the lead he lets go the line so that the lead flies well ahead of the ship, and this gives time for the lead to reach the



bottom before the ship is up to it and therefore the proper "up and down" depth of the water is measured. The leadsman can feel when the lead reaches the bottom. He then gathers the line in quickly and calls the "Soundings."

Examples:

"At a depth of 5 fathoms...."By the mark—5".

At a depth of 51/4 fathoms.... "And a quarter—5".

At a depth of 51/2 fathoms...."And a half-5". At a depth of 5\% fathoms.....

"A quarter less-6". At a depth of 6 fathoms....."Deep-6"."

### DEEP-SEA SOUNDING

The lead and line can only be used in shallow water, and when the ship is steaming slowly. At other times "Soundings" are obtained by a machine called a sounding machine, which has a lead attached to a long length of thin wire, which can be allowed to run out very quickly. A brass guard tube in which is placed a glass chemical tube is secured to the wire in a special manner. The depth of water is ascertained by means of this glass chemical tube, which shows red, but is turned white by the action of water. Thus, the deeper the tube goes, the greater the pressure, and the farther the water is forced up the tube. A boxwood scale is used for reading the length of discolouration in the tube

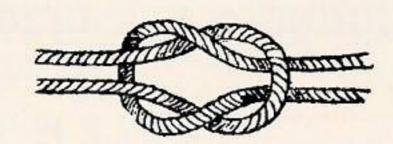
after the sounding has been taken.

#### ECHO SOUNDING

There is also an electrical machine called "The Echo Sounding Machine" which transmits a sound wave to the Sea's bottom and measures the depth by the length of time the wave takes to return to a receiver in the ship's bottom, the speed of sound in water being known.

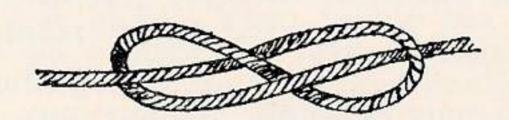
### BENDS AND HITCHES

REEF KNOT



Used to join two rope ends together.

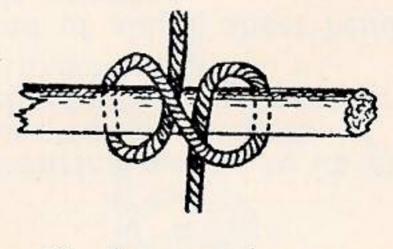
FIGURE OF EIGHT KNOT



Put in the end of a rope to prevent it unreeving through a block.

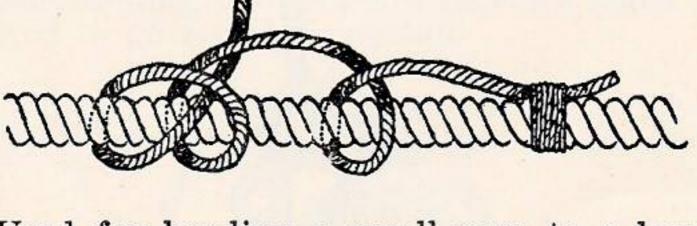
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#### CLOVE HITCH



Used generally in securing a small rope to a larger one and keeping the ends still free, as in securing ratlines to the shrouds of rigging or securing the ends of butt slings.

### ROLLING HITCH

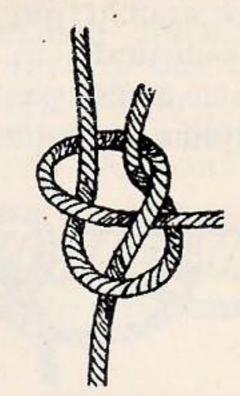


Used for bending a small rope to a larger one, putting a tail jigger on a rope, or securing

structor what tail jiggers and gantlines are.)

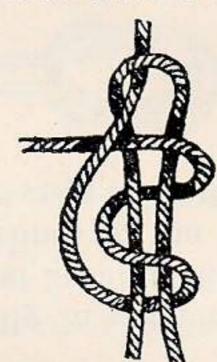
hammocks to the gantlines. (Ask your in-

### SINGLE SHEET BEND



Used for joining together two ropes ends or securing boat's lazy painter to Jacob's ladder.

### DOUBLE SHEET BEND

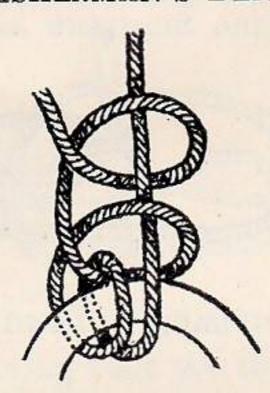


Used for securing a rope to an eye, such as boats' painters to the lizards of the lower booms, and also for joining together two ropes of different thicknesses.

Used instead of single sheet bend when extra security is required.

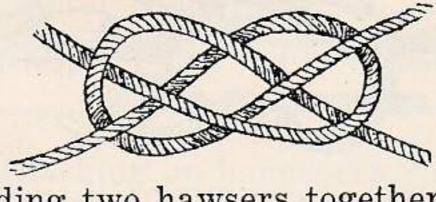
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### FISHERMAN'S BEND



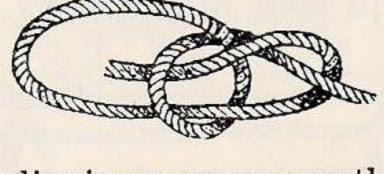
For bending a hawser to the ring of a buoy—or a rope to a boat's anchor.

### CARRICK BEND



For bending two hawsers together when required to go round a capstan.

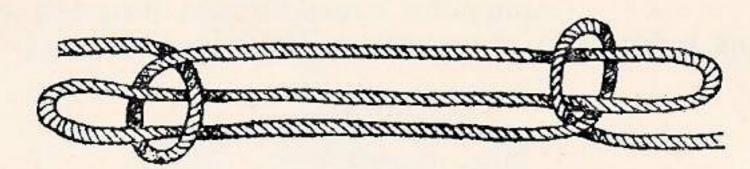
### BOWLINE



Used for slinging a man over the ship's side

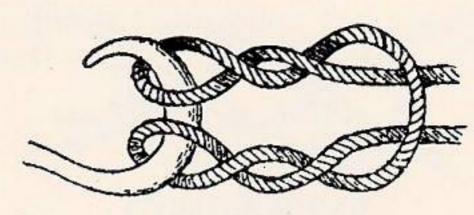
or bending two hawsers together.

### SHEEPSHANK



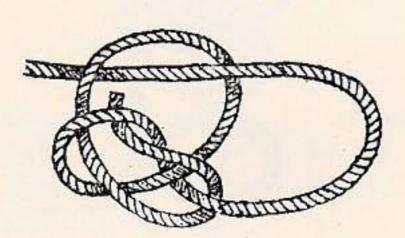
Used for shortening a rope which requires lengthening again.

#### CATSPAW



Hooking a jigger to the end of a rope or shortening up a bale sling strop.

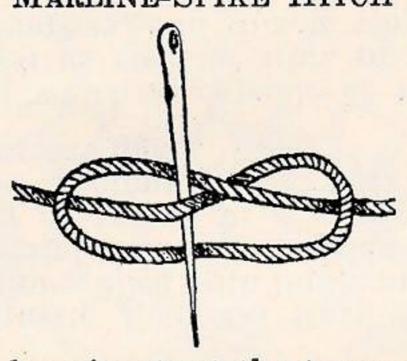
### RUNNING BOWLINE



Throwing over anything out of reach.

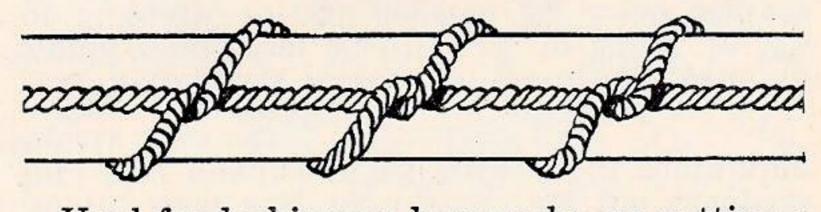
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### MARLINE-SPIKE HITCH



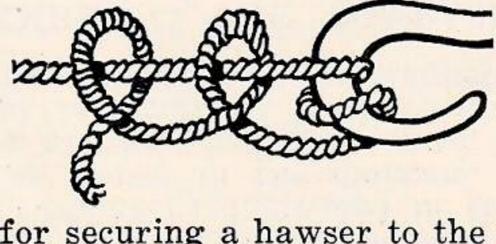
Used for heaving taut the turns of a seizing with a marline-spike.

### MARLINE HITCH



Used for lashing up hammocks, or putting a temporary seizing on two ropes or spars.

ROUND TURN AND TWO HALF HITCHES



Used for securing a hawser to the ring of a buoy. In this case the rope should be parcelled.

### COMPASS

The Compass is an instrument which is made up of a circular card, pivoted in the centre, marked as snown in the diagram. On the underside, and attached to the card, are magnets-that is, magnetic needles-which keep

the Compass pointing to the Magnetic North.

REMEMBER - THE COMPASS DOES NOT MOVE, THE SHIP MOVES AROUND THE COMPASS.

There are four cardinal points, North, South, East and West-dividing the Compass into four quadrants, each quadrant containing ninety degrees.

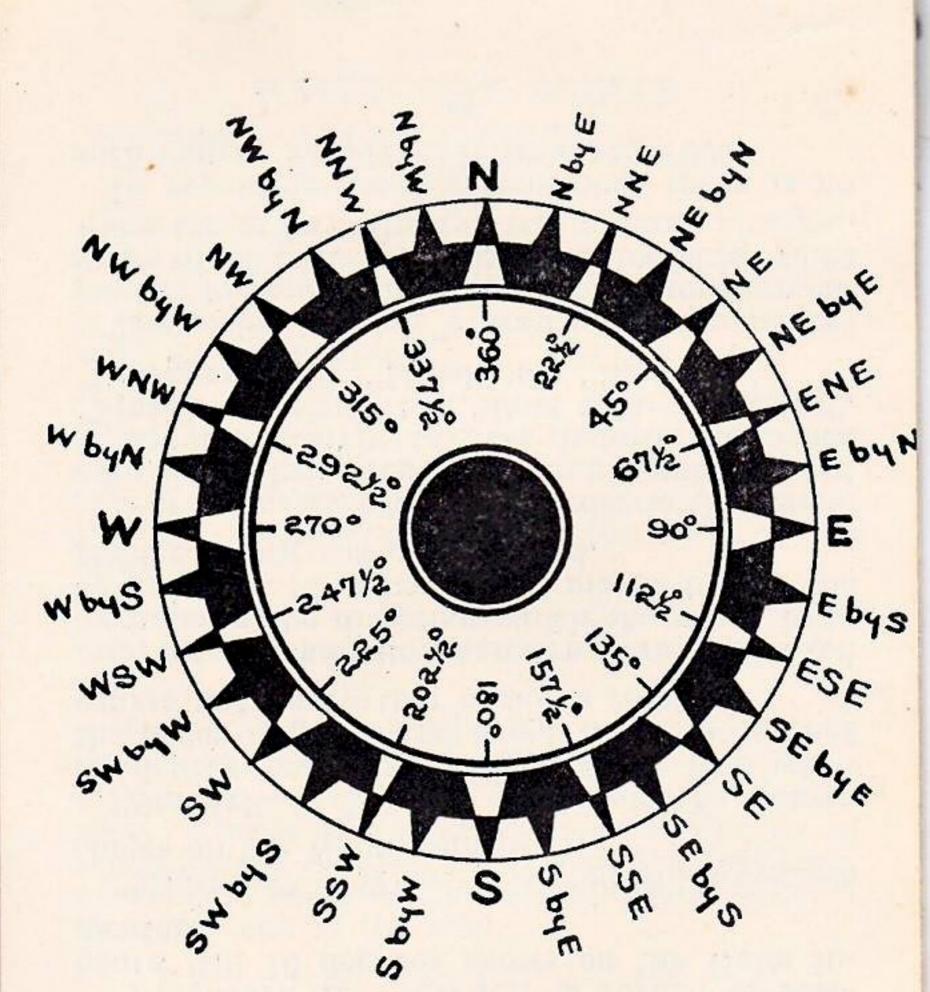
If a compass is read in quadrant form we would read from N. to E., S. to E., N. to W., or S. to W.-N. 20 degrees E., S. 30 degrees E., N. 60 degrees W.

If a compass is marked in all around form it will be read as follows-225 degrees, 020 degress, 150 degrees, 300 degrees.

The Magnetic Compass Card is set in a bowl, sometimes filled with liquid and protected from wind and damp by a glass cover, the whole being contained in a wooden case and stand called a binnacle which is fitted with lamps for use at night.

No metal which is capable of attracting a magnet, such as steel or iron, may be placed near the compass, and this is why a seaman

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always has to take his knife off before taking a "trick" at the wheel, and also why all stanchions, etc., on the bridge near the compass are made of brass or bronze.

THE HELM The ship is steered by means of a rudder which is turned from side to side by means of

a quadrant fitted to the head of the rudder. The quadrant is turned by means of chain or engine. The steering wheel is always turned

the way in which you wish to go.

The amount of wheel put on or angle the rudder is turned is shown by a Helm indicator which is located forward of the wheel.

Orders to the Helsman are given as follows: "Starboard 10"-(Wheel is turned to starboard 'till 10 degrees shows on the Helm indicator).

"Midships"—(Wheel is turned 'till 0 degrees shows on the Helm indicator).

"Steady"—Helmsman reads off the course or degree breast of the Lubber's line when the order is given and keeps the ship on that course until a further order is received.

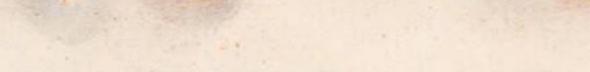
Orders to the helmsman are always prefixed by naming the direction which the wheel is to be put-e.g. "Starboard 10" means to put the rudder 10 degrees to starboard.

When altering course, the order to the helmsman should be so regulated that the ship's head is brought nearly to rest before the order "Steady" is given. e.g. "Port 25", "Midships", "Starboard 10", "Midships", "Steady".

The order "Steady" means that the helmsman is to steady the ship on that point or degree which was opposite the lubber's point when the order "Steady" was given.

In repeating courses remember there is no such course as 360°. It is always 000°.

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NAVIGATION LIGHTS

Side Lights .- Port Bow Light-Red. Starboard Bow Light-Green. Visible 2 miles.

Carried by all vessels, sail and steam, when under way, that is, when not anchored. Each bow light shows over an arc of 10 points, that is, from right ahead to two points abaft, the beam on either side.

Steaming Light.—A white light carried by steamships and hoisted on the foremast, and showing over an arc of 20 points, that is, from two points abaft the beam on one side round the bows, to two points abaft the beam on the other side.

Stern Light or Overtaking Light.—A white light shown by ships over the stern when under way.

Anchor Light .- Ships at anchor carry a white all round light on the jackstaff or forestay in such a position that it can be clearly seen. Visible all round the horizon, and up to a distance of 1 mile. Ships over 150 feet long, at anchor, carry an additional white light in the after end of the ship.

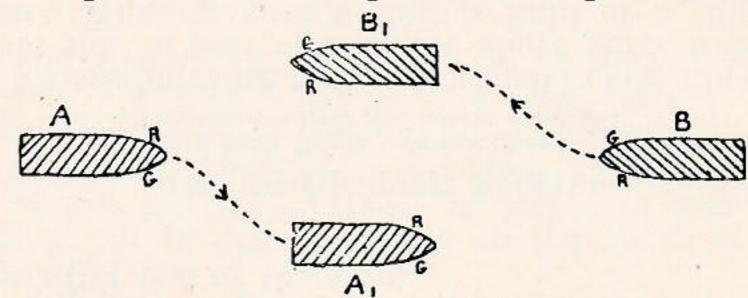
## RULES OF THE ROAD

"When both lights you see ahead, Starboard wheel and show your red."

Vessels meeting end on must pass each other port side to port side as the above verse tells you. When you see both side light of a ship

coming towards you, starboard your wheel at

once. She will do the same, and you will therefore pass each other port side to port side.



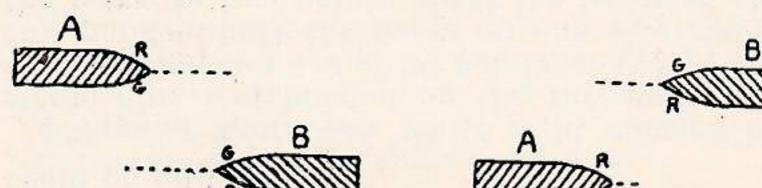
"Green to green or red to red. Perfect Safety—go ahead!"

In this case you are quite clear of the other ship, as if it is a case of green to green he is passing down your Starboard side, and is red to red down your Port side.

But never fail to watch any light, because, although you have seen him, he may not have seen you, and might alter course after you had thought him all safe.

GREEN TO GREEN.

RED TO RED.



If to your Starboard red appear,
It is your duty to keep clear—
To act as judgment says is proper.
To Port—or Starboard—Back—or stop her."
"But when upon your Port is seen
A steamer's Starboard light is green.
There's not so much for you to do,
For green to Port keeps clear of you."

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When two ships are approaching each other, the one which has the other on the starboard side keeps out of the way and is responsible that she alters her direction so as to avoid the other ship.

The other ship should keep steady on her course, but should keep a sharp look-out on the approaching ship ready to alter course or go astern if necessary to avoid collision.

An overtaking ship always keeps out of the way of the ship she is overtaking.

Even if you are in the right according to the rule of the road, do not hang on too long, but take action in time to avoid a bump. A collision never pays.

"Both in safety and in doubt,
Always keep a good look out,
In danger with no room to turn—
Ease her—stop her—go astern!"

### BOAT RULES

Steamboats should give way to boats under sail and to boats under oars, except in the case of where one boat is overtaking the other, when the overtaking boat should give way.

Boats under oars always have right of way, except when overtaking.

### BOATS

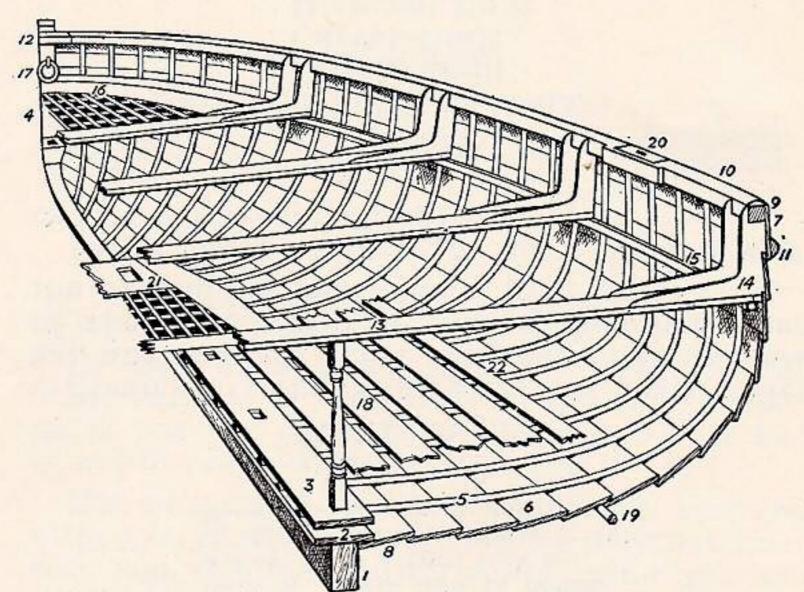
There are four builds of boats.

Clinker-Built

Carvel Built

Diagonal-Built

Study and visualize the part of this Clinker-Built Boat.



- 1. Keel.
- 2. Hog.
- 3. Keelson.
- 4. Stem with Apron Pin.
- 5. Timber or Floors.
- 6. Planks.
- 7. Top Strake.
- 8. Garboard Strake.
- 9. Gunwhale.
- 10. Capping.
- 11. Rubber or Rubbing Strake.
- 12. Breast Hook.
- 13. Thwart.
- 14. Knees.
- Risings or Stringers.
- Head Sheets.
- 17. Ring Bolt.
- 18. Bottom Boards.
- 19. Bilge Rail with Handholes.
- 20. Socket for Crutch.
- 21. Fore Sheets. 22. Stretcher Rail.

### ORDERS USED IN BOAT PULLING

Note.—All orders are given while the blades are in the water. Crew pulls one complete stroke after order, before complying.

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A double banked boat is one in which two men sit on each thwart, each pulling an oar.

### Orders:

- (a) Oars Ready-Slide oars along the gunwale and crew grasp the looms. (Stand by to toss your oars.)
- (b) Oars Up—Crew gives looms sharp cant downward, bring oars to vertical position, blades fore and aft and looms resting on bottom boards between their feet.
- (c) Oars Down-Crew drops oars into rowlocks together, taking care to ease them the last few inches to prevent damage and sit with arms bent, width of shoulders apart grasping oar, feet planted firmly on stretchers, body erect, heads up, looking at coxswain. This is the position of "Oars". (d) Give Way Together—Crew starts pulling,
- taking time from the two stroke oarsmen. The starboard stroke sets the time. (e) Oars—Stop pulling.
- (f)
- Bows-The two bowmen toss their oars, "kiss" the blades, i.e., touch the two blades together, then lower the oars blades forward down the centre of the boat. They then stand by with the boathooks to come alongside.
- (g) Way Enough—The crew toss their oars, the stroke oar on the side which is nearest the gangway, boats his oar blade forward

stands by to seize the gangway.

along the outside of the thwarts

#### 2. SINGLE BANKED BOATS.

A single banked boat is one in which one man sits on each thwart.

Note.—Oars are never tossed in a single banked boat. The bow oar is stowed down the centre of the boat, blade forward, the remainder down the side, blades aft.

Orders:

- (a) Oars Ready—The blades of the oars are placed on the gunwale, oars in the crutches.
- (b) Oars Out—Crew slides oars out and assumes the position of "Oars".
- (c) Give Way Together—As in Double Banked Boats.

(d) Oars-As in Double Banked Boats.

(e) Bows—Bowman brings the blade of his oar forward and slides oar down centre of boat, then prepares to fend off and hold boat alongside. Note.—Oar should only be raised sufficiently to clear the gunwale.

(f) Way Enough—Crew let the oars swing parallel to the boat, boat them, unship

crutches.

#### 3. Leaving Alonside.

- (a) Shove off. Forward and Aft, or both as required. Carried out by Bowman and Stroke Oar. (Bowman to use boat-hook.)
  - (b) In Fenders.(c) Out Oars.
- (d) Stand by. (Crew lean forward ready to commence the stroke.)

(e) Give way together.

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### 4. Coming Alonside.

(a) Bows. One stroke after the order, bowman brings the blade of his oar forward and slides oar down the centre of the boat, stands by to fend off or hold boat alongside with the boathook.

(b) Way enough. One stroke after the order crew let the oars swing aft parallel to the boat, boat them, and unship the crutches.

### LOWERING A SEA BOAT

The lee boat is, when possible, the one to lower, and in rough sea a good lee should be made and, if necessary, oiled used before lowering the boat.

On a sea boat's crew being called away they man their boat instantly and put on their lifebelts. The oars are got ready on the gunwale on the outboard side only, life lines crossed to prevent the boat surging in a fore and aft direction, and the men on the outboard side bear the boat off from the ship's side with the looms of their oars. No one is to be abaft the after fall or before the foremost fall.

Seaboat lowerers, consisting of a leading

hand and two seamen, are told off to each fall.

Order

Action

Away Seaboat's crew, man the............Boat.—
Crew man the boat piped. Coxswain and
Bowman see that boat is off pins. Stroke
sees that plug is in. Crew sits on thwarts,
dons life belts and gets oars ready. Outboard oars are placed in crutches and
looms slid across boat to bear off the ship's
side. Lowerers stand by grips and falls.

Slip the Gripes.—Gripes are slipped.

Turns for Lowering.—All but last turn and one-half taken off cleats by lowerers.

Start the Falls.—The falls are eased out around cleats until it is seen that they are rendering freely.

Lower Away.—Boat is lowered more rapidly. Care must be taken to keep it under control.

Handsomely Foreward or Aft (As applicable).—This order is given when the boat is not being lowered evenly, in which case the fall mentioned is to be lowered more slowly.

Vast Lowering.—When the boat is low enough.

Lowerers hold on to the falls.

Out Pins.—Bowman and Coxswain take out the pins. (Note the after pin is ALWAYS to be taken out FIRST.) The Bowman and Coxswain then raise their hands to signify completion. Coxswain then reports "Pins out Sir."

Then at the first favourable opportunity, endeavouring to drop the boat on the top of a wave and not in the trough.

Slip.—Coxswain lets go the fore and after, thus releasing the boat.

Note.—"Handsomely"—means more slowly, "Roundly"—means rapidly, "Avast Lowering"—means cease lowering.

With the momentum given the boat by the ship and the helm being over, she will sheer away from the ship. The crew at once gets

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out their oars, the boat rope is slipped and the crew give way. The general instructions on procedure in boats under oars applies to seaboats; oars should, however, never be kept tossed, but boated on arrival alongside.

### HOISTING A SEABOAT

A lee is formed by the ship if possible and the falls are well overhauled. Heaving lines are passed to the boat first, one forward and one aft and the ends manned inboard. The boat is hooked on, foremost fall first. The lifelines at the davit heads are crossed, the foremost one being led aft and the after one forward. In calm weather all hands but coxswain and bowman come inboard up the lifelines. In rough weather the outboard oars are used to fend off as in lowering, the remaining hands taking their weight on the lifelines. Coxswain and bowman prepare disengaging gear before coming alongside. Coxswain reports "ready in the boat" when it is hooked on.

### ORDERS FOR HOISTING

Order Action

Haul Taught Singly.—Hands on falls take down all slack.

Marry.—Hands on falls join them, holding both falls in their hands.

Hoist Away.—Hands run down deck with falls. High Enough.—Hands stop running.

If boat is not square:

Separate the Falls.—Hands act as ordered.

Ship Side or Midship Fall-Hoist.—Hands on fall named act as ordered.

High Enough.—Stop hoisting. Life lines are passed, then

Ease to the Lifelines.—Hands check falls handsomely until weight is on lifelines.

Light To.—Hands drop falls and turns are taken around the cleats.

When the boat is up and the falls secured, the coxswain takes her weight off the pins by setting up the fore and after, and crew gripes her too; the lifelines are left clear, the lifebelts replaced and the tiller stopped over towards the ship. Coxswain reports to the Officer of the Watch ".....boat secured for sea, Sir, boat off the pins, plug in, falls clear for running."

In a seaway it is essential to get the boat clear of the water as soon as possible. The falls should be manned, married; the slack of the falls being rendered as required while the boat is being hooked on. Immediately the report "ready in the boat" is received, the order

"Hoist away" should be given.

### ANCHORS

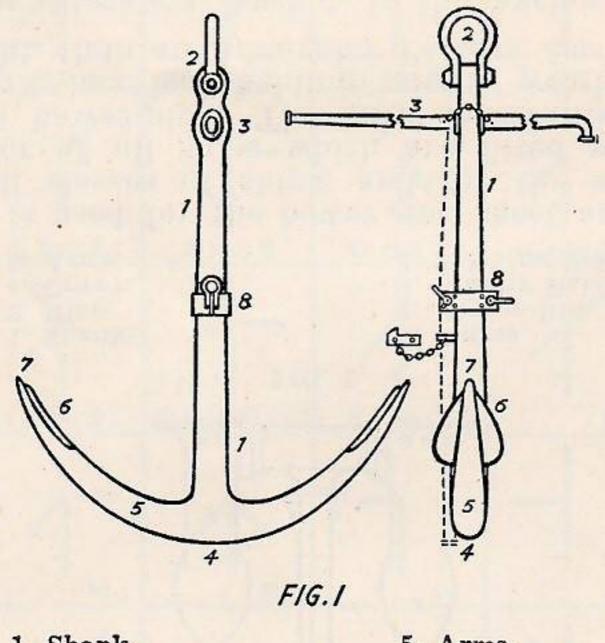
There are two types of anchors used in the service today:

- 1. Admiralty Pattern.
- 2. Stockless.

(1) ADMIRALTY PATTERN (See Fig. 1) Has the arms and the shank in one, with the stock, when in position, at right-angles to the shank. When the anchor is dragged along the

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bottom, the stock forces the flukes to stand upright. The flukes thus dig into the bottom.



- 1. Shank. 2. Ring.
- 3. Stock.
- 4. Crown.
- 5. Arms.
- 6. Flukes. 7. Pea or Bill.

8. Gravity Band.

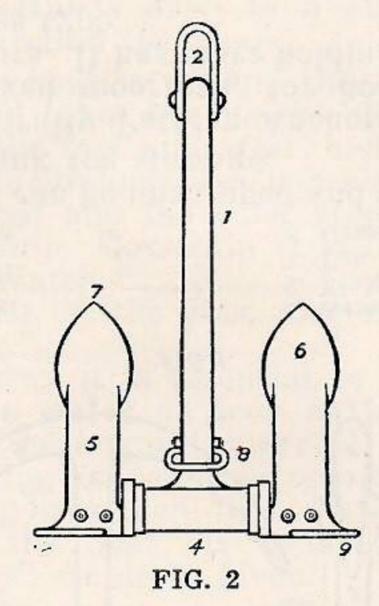
The stock can be unshipped and placed alongside the shank for stowage.

The Admiralty Pattern Anchor is now used only for fixed moorings, for boats, and for kedge anchors. It has more holding power than

the Stockless type. (2) STOCKLESS (See Fig. 2) The type of anchor noted here has no stock.

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the hawsepipe; a comparatively simple operation. The tripping palms on the crown force the flukes down when dragged along the bottom of the sea and thus force them to dig in and take hold.



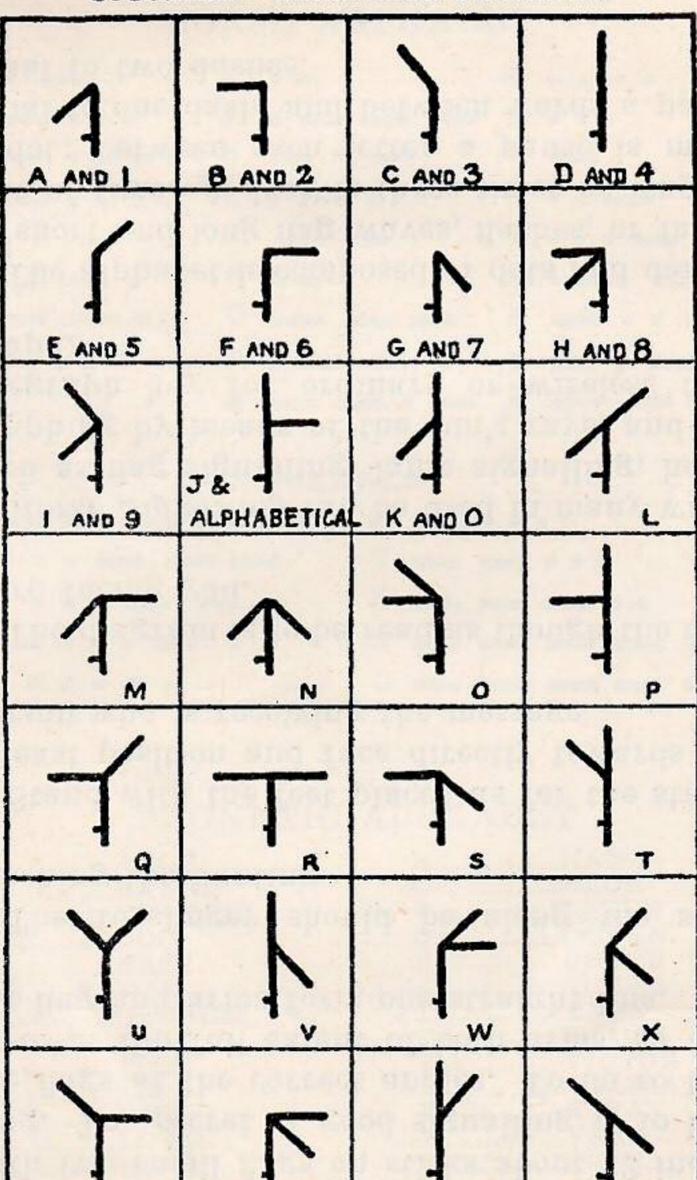
- 1. Shank.
- 2. Ring.
- 4. Crown.
- 5. Arms.
- 6. Flukes.
- 7. Pea or Bill.
- 8. Gravity Band.
- 9. Tripping Palms.

It is used for the bower and sheet anchors in all classes of ships, and for the stream anchor of all ships which are fitted with a stern hawse-pipe. The only disadvantage is that it has less holding power, weight for weight, than an Admiralty Pattern Anchor.

The Stockless Anchor is the anchor most generally used today.

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SIGNALS.—SEMAPHORE ALPHABET.



NUMERAL

ANNUL

Semaphore signalling is usually carried out with two small flags on sticks about 12 inches long. The secret of good signalling is to hold the flags at the correct angles. To do so hold them at the full extent of both arms, so that the flag and arms form one straight line.

The forefinger should be along the stick touching the bunting.

Stand with the feet placed as for the standat-east position and face directly towards the person who is receiving the message.

The diagram is to be read as though the man were facing you.

Morse Signalling can be used in many ways, such as flag signalling, lamp signalling, heliographing by means of the sun's rays, and the telegraph key for ordinary or wireless telegraph.

The alphabet is composed of dots and dashes or short and long flag waves, flashes, or intervals of time. A dash is three times as long as a dot; between each letter a pause is made equal to one dash, and between words a pause equal to two dashes.

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#### MORSE ALPHABET

A	· cuist	1	· our somball	R	
В		J	0 00000 Pillots 00000	S	
C		K	0000 C 0000	T	
p		L		U	
E		M		٧	
F	· · · · · ·	N		W	
G	motion assume o	0		X	
Н		P	• come come 0	Y	
		Q	-	Z	

### NUMERALS

1	·	6 • • • •
2	0 0 mm mm mm	7
3		8
4		9
5		0

### PHONETIC ALPHABET

A	ABLE	N	NAN
	BAKER	0	OBOE
	CHARLIE	P	PETER
	DOG	Q	QUEEN
	EASY		ROGER
	FOX	S	SUGAR
A STATE OF THE PARTY OF THE PAR	TRACTOR		TARE
	HOW	U	UNCLE
I	ITEM	V	VICTOR
J	JIG	W	WILLIAM
	KING	X	X RAY
The second secon	LOVE	Y	YOKE
	MIKE	Z	ZEBRA

### FIRST AID AND TREATMENT NOTES

Normal Pulse 72 per minute "Breathing 15 to 18 per minute "Temperature - 98.70°

Accident.—A life may often be saved by prompt and proper action taken by a person on the spot while waiting for the arrival of a doctor.

accoor.

Bleeding.—May be either external or internal, and in the case of a cut artery the blood is of a bright red color and escapes in spurts.

Treatment.—IMMEDIATELY compress the artery against the bone close to the wound, but between it and the heart. Pressure should be obtained by the fingers while someone prepares an improvised tourniquet, or if no one else is available until medical assistance arrives — absolute rest is essential. If the bleeding is from a limb, raise it.

An improvised Tourniquet may be made as follows: Take a handkerchief, a smooth rounded stone and a stick, wrap up the stone in the centre of the handkerchief, tie a knot over it and place the stone over the artery, pass the ends of the handkerchief round the limb and tie them securely, leaving sufficient space for the stick to be admitted; pass the stick then between the handkerchief and the skin and carefully twist it until by tightening the handkerchief the stone is pressed upon the artery with sufficient force to arrest the flow of blood. The ends of the stick must be secured with a bandage to prevent the tourniquet untwisting.

Internal Bleeding.—The symptoms are prostration and weakness. The surface of the body is cold and the face pale, the lips lose their colour. The pulse is weak, there is sighing, breathing, and cold, clammy sweat.

Keep the patient absolutely quiet and do Not

give stimulants.

Broken Limbs.—Gently put the broken limb straight after cutting off the clothes. Then fix it in this position by means of a rifle, roll up newspapers or pieces of wood, etc. If no splints are available, simply—in the case of a leg—fix the broken limb to the sound one, and—in the case of an arm—fix to the chest, using in the former, the sound limb, and in the latter the chest, to act as a splint.—In fixing a broken limb, care should be taken not to bandare too tightly, as considerable swelling is likely to take place.

A fractured collar hope should be treated by

A fractured collar bone should be treated by bandaging the arm across the chest so that the hand rests on the opposite shoulder. The elbow should be free, but the forearm and arm bandaged across the chest.

Drowning.—Restoration by Schafer method. If breathing has ceased, immediately on removal from the water, place the patient face downwards on the ground, with the arms drawn forward and the face turned to the side. Then, without stoping to remove or loosen clothing, commence artificial respiration. To effect artificial respiration, put yourself astride, or on one side of the patient's body, in a kneeling or squatting position, facing his head. Placing

your hands flat on the small of his back, with the thumbs parallel and nearly touching, and the fingers spread out over the lowest ribs, lean forward with the arm straight and steadily allow the weight of your body to fall on the wrist, and so produce a firm, downward pressure, which must not be violent, on the loins and the lower part of the back. This part of the operation should occupy the time necessary to count-slowly-one, two, three. By this means the air (and water, if there be any) is driven out of the patient's lungs. Water and slime from the air passages may also run out. Immediately after making the downward pressure, swing backwards so as to relax the pressure, and allow air to enter the lungs. Do not lift the hands from the patient's body. This part of the operation should occupy the time necessary to count-slowly-one, two. Repeat, this forward and backward movement (pressure and relaxation of pressure) 12 or 15 times a minute, without any marked pause between the movements. Whilst the operator is carrying out artificial respiration, others may, if there be opportunity, busy themselves with applying hot flannels, hot bottles, etc., between the thighs and to the armpits and feet, or promote circulation by friction, but no attempt should be made to remove wet clothing, or give restoratives by the mouth, till natural breathing has recommenced. When this has taken place, allow the patient to lie on the right side and apply friction over the surface of the body by using handkerchiefs, flannel, etc., rubbing legs, arms,

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and body, all towards the heart, and continue

after the patient has been wrapped in blankets or dry clothing. As soon as passible after complete recovery of respiration remove patient to nearest shelter. On restoration, and if power of swallowing has returned, small quantities of warm coffee, tea, milk, wine, etc., may be given. Encourage patient to sleep, but watch carefully for some time and allow free circulation of air around patient.

### SEA TERMS

#### I.—PRINCIPAL PARTS OF A SHIP

Stem.—The extreme front of a ship. Stern.—The rear end of a ship.

Bow .- The part of the ship's side near the stem.

Quarter.—The part of the ship's side near the stern. Beam.—The part of the side between the bow and the quarter. Also breadth of the ship.

Starboard Side.—The righ-hand side looking forward. Port Side.—The left-hand side looking forward.

Fore and Aft Line.-The line between the stem and the stern (in line with the keel).

Forecastle.-The fore part of the upper deck. Quarterdeck .- The after part of the upper deck.

Amidships .- Part lying midway between stem and stern. Athwartships.—At right angles to the fore and aft line. Bridge.-Raised platform on forward deck from which the ship is controlled. Brow .- A long portable platform usually fitted with hand-

rail.

Bulkheads .- The walls which divide the ship into compartments.

Cabin .- Officer's room. Companionway .- Ladder extending from one deck to another or stairway between decks.

Davits .- Apparatus for hoisting boats on board.

Deck .- Floor of ship. Dinghy.—Small boat. Deckhead.—Ceilings.

Freeboard.—Height of a ship's upper deck above the water line.

Gangway.-Steps down ship's side. When used as an order means "Stand aside and allow others to pass." Gunroom.-Mess for Sub-Lieutenants, Midshipmen and Cadets.

Galley.—Kitchen.

Halyard.-Rope used for hoisting and lowering sails and flags.

Heads.—Toilets.

Messdeck.—Seamen's quarters.

Small Arms.—Rifles, bayonets, pistols.

Tonnage.—Displacement of ship in Naval Service as against "cubic content" in Merchant Service.

Wardroom.—Officer's mess. For Officers of the rank of

Lieutenant up to Commander.

### II.—Some General Naval Terms

Abeam.—Directly at right angles to the fore and aft line. Ahead.—Directly in advance.

Astern .- Directly in rear.

Bearing .- Direction in terms of an angle relative to ship's compass or ship's head.

Con.—To direct the steering of a ship.

On the Bow .- A bearing midway between ahead and abeam.

On the Quarter.—A bearing midway between astern and abeam.

Flag Officer.-Rear-Admiral or above.

Flag Lieutenant.—Personal aide to Flag Officer—usually a Signal Officer.

Captain-An Officer appointed to command a ship.

Comanding Officer.-The Officer or other person on board and in actual command at the moment.

Captain (D).-Captain of a Destroyer Flotilla.

Padre.—Chaplain.

Yeoman of Signals.—Petty Officer Rate in Signal Branch (one of the oldest rates in Navy).

Adrift.—Drifting aimlessly; not secured. (Slang: Absent from place of duty.)

Aloft.-Up a mast or up.

Ashore.—On land.

Avast or 'Vast .- To stop.

Aweigh.—Anchor is broken out of ground.

Aye Aye.—Yes.

Back .- Wind is said to back when it moves contra clockwise.

Belay.—Secure—sometimes cancel a previous order.

Carry On.—Proceed.

Grog Money-Pay allowance in lieu of rum ration.

Hail.—To call.

Hard Living Money.—Extra pay to compensate for discomfort in small ships.

Heave.—To haul or throw (heaving line and "vast heaving"). Leeward.—Direction to which the wind is blowing.

Liberty Men.—Those permitted to go ashore on leave. Liberty Boat.—A boat for liberty men.

List.—A permanent heel of a ship to one side of the other. Make and Men.—Spare time from regular duties—not leave. Origin from time allowed for mending clothes.

On Board.—Inside a ship. Pipe Down.—Hands turn in or hands will not be required until further orders. (Slang: Shut up or Keep Quiet.) Rounds.—Inspection of ship by officers or others in

Rig-of-the-Day.—Dress ordered for the day.

Scran Bag.—Depository for personal gear left lying about. "Lost and Found" department of a ship.

Secure.-To indicate cessation of work. Make fast with line or lines. Sick Bay.—Ship's hospital and dispensary.

Shipshape.—In proper seamanlike manner. Stand By.—To be in readiness.

Stand Easy.—Recess.

authority.

Standing Orders.—Permanent orders.

Under Way .- Freed from moorings-not attached to the ground.

Veer .- To pay or ease out a cable. Wind is said to "veer" when it shifts clockwise. Weighing Anchor.—Raising anchor.

Windward.—The direction from which the wind blows.

#### III.—NAVAL SLANG Clinker Knocker .- A stoker.

Chippy Chaps.—Shipwrights.

Crusher.—Regulating P.O.
Dhobey.—Laundry (Derived from "dhobi;" Hindustani for "Laundryman"). To fit Double Clews .- To get married.

Granny Knot.-Term of contempt used when a reef knot

is crossed the wrong way. Gash.—Spare or left overs.

