



The shackle being 'moused' to stop it unscrewing.

thickness of the steel used in making each link) is normally 6mm for a dinghy and 8mm for a small sail cruiser of up to 7.5m overall length. Match this with nylon rope with a diameter of 10 and 14mm respectively. Shackles slightly larger than the chain size should be used and they should be 'moused', meaning the shackle should be bound with wire to stop it coming unscrewed.

The local harbour master should be consulted about anchoring and about suitable locations where it's permitted and safe to do so. It's always preferable to anchor in sand or firm mud. The anchor can then dig well in.

Anchoring technique is one of the subjects covered in sailing school courses. If you're in any doubt at all about anchoring for an overnight stay, particularly if increasing winds or waves are likely, plan in advance to arrive at a marina or harbour well before dark.

Anchors used on rocky or weed-covered seabed can get stuck and become difficult to retrieve. On many types of anchor, a suitable length of 'trip line' can be attached to the crown of the anchor and a float on the surface. If the anchor gets stuck, this trip line can then be used to lift it clear of the obstruction.

## Moorings

### Warps

Warps are the ropes used to tie a boat to mooring points. Ideally you should have two for the bow and two for the stern so that two of them can be used as 'springs', as shown in the



diagram, to stop the boat swinging and moving excessively when tied up. They need to be long enough to allow for the rise and fall of the tide, the range of which is indicated on tide tables. Some inexperienced boat owners have returned to their boat to find it suspended from the harbour wall by ropes that were too short for the fall of the tide.

Various rope types can be used for mooring warps but nylon has the advantage of being particularly strong and more likely to absorb shocks by stretching.

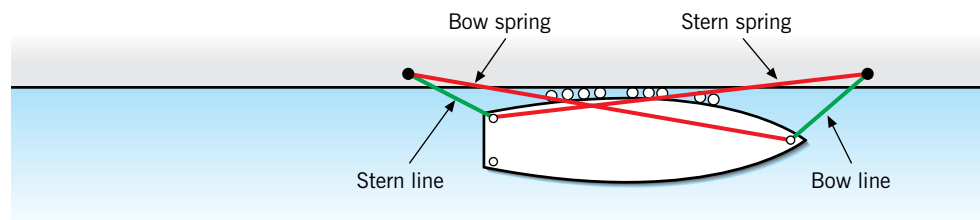
On inland waterways, L-shaped anchors called 'rond' anchors are used. These are tied to the end of the warps and pushed into the ground on the bank. It can be difficult to hold the boat and get a rond anchor into the ground at the same time, and it's much easier if someone on the bank holds the boat by the ropes until you're sure you have the anchors firmly in place.

Never throw any type of anchor. Rond anchors thrown onto the bank have a nasty tendency to bounce back and hit the boat or you.

## Moorings tackle maintenance

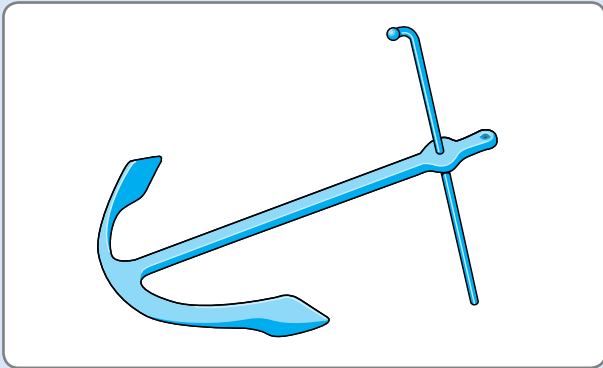
In the case of permanently fixed mooring equipment – such as swinging moorings out in an estuary – regular maintenance is essential, as they sustain wear through use, abrasion with the seabed and corrosion. Insurance companies usually specify that such equipment is regularly checked and maintained by qualified and experienced specialists. This should not be ignored. If a boat breaks free from a mooring, the insurer's first questions will be about mooring maintenance before a claim will even be considered.

The arrangement of 'springs' in mooring lines.



## Types of anchor

Many new and quite expensive types of anchor have been developed claiming all kinds of advantages for those who cruise far and wide in larger sail cruisers. However, the ones described below are a few of the tried and tested traditional types.

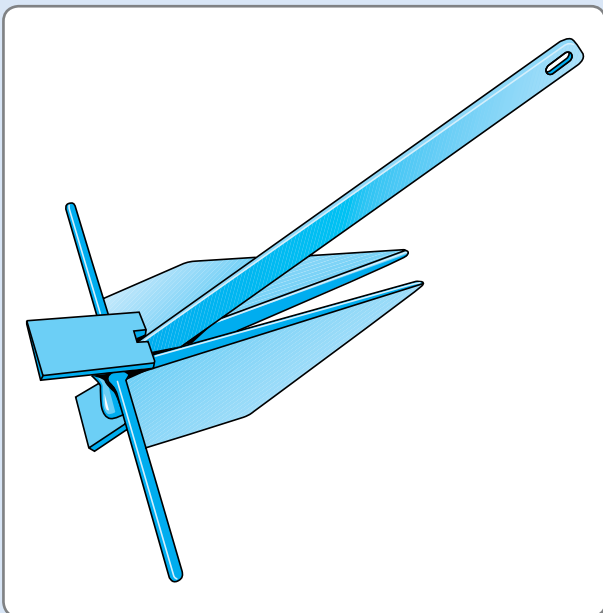


### Fisherman

The fisherman anchor has been used for centuries and is still to be found on some boats. It can be effective on rocks or in seaweed but is cumbersome; can become entangled with its chain; the uppermost of its sharp points (called 'flukes') can damage a boat as the tide goes out; and its folding stock has to be pegged in place so that the flukes dig into the seabed. If you get one with a second-hand boat, consider replacing it with one of the following.

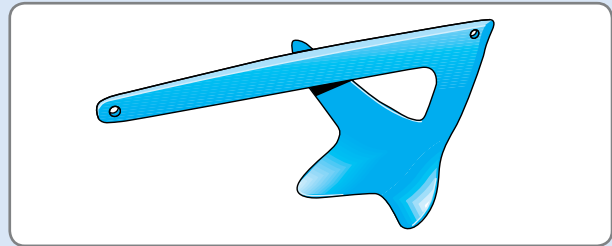
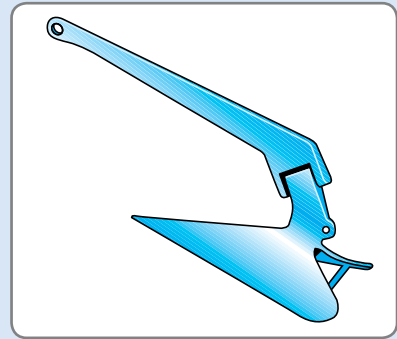
### Danforth

This anchor has good holding power and folds flat when stored. You need to take care when handling it, as fingers can get trapped when the flukes swivel.



### CQR or plough

This type 'ploughs' into the seabed and also holds well. It can be kept conveniently in a stem head roller over the bow of the boat.

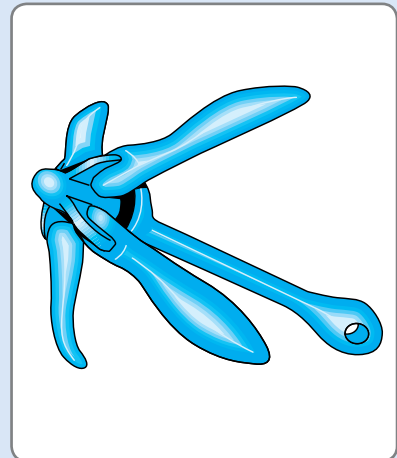


### Bruce

The Bruce anchor has particularly good holding power in relation to its weight and stores well on a stem head roller.

### Grapnel

The folding grapnel anchor is cheap and convenient for use as a 'lunch hook' on a day boat or dinghy but doesn't hold as well as the above types. It can be reasonably effective in rocky areas but may then get wedged and become difficult to remove.



A selection of anchors for sale, some with chain and warp attached.

