

# The joys of . springs

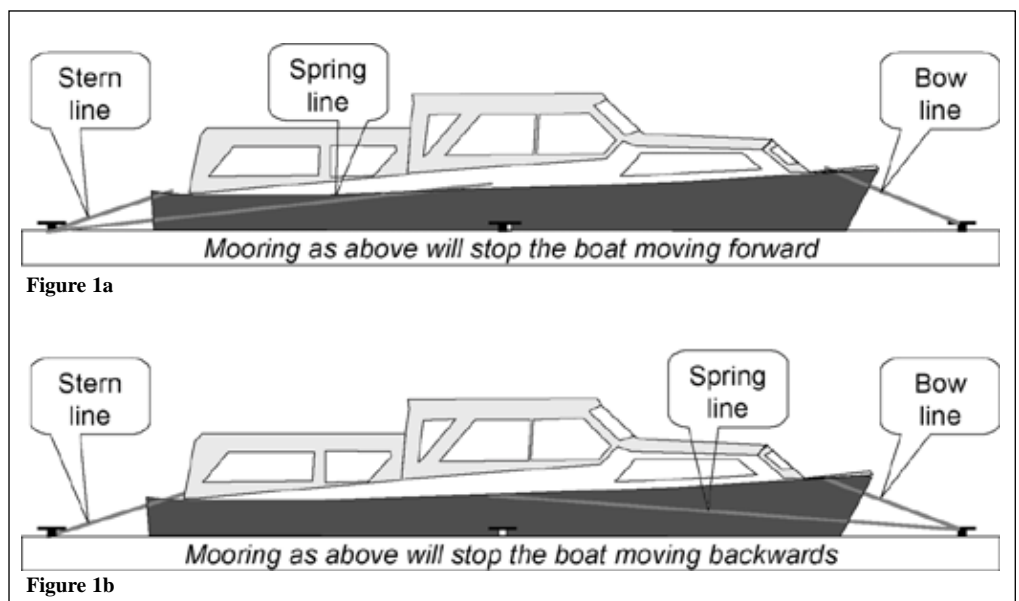
**Having done a bit of sailing, and recently finding himself on the Shannon in a hire-boat, Richard Holbrook laments the lack of knowledge and use of springs in tying up a boat on the river**

**W**inding up on the Shannon some years ago on a rented boat, I attended the obligatory video and had the five-minute spin round the bridge in Carrick-on-Shannon, then I was on my own.

Everywhere I went I noticed all the boats gently nodding into the pontoons of the marinas. The wind or the current would push the boat into the pontoon then it would drift back only to repeat the operation over and over again. The result – a dented bow and a chunk out of all the pontoons. I wondered then, and still wonder why the majority of boats are tied up in a manner that allows them to repeatedly nod into the pontoons. Some owners use bow fenders to protect against this damage.

The other related observation is why boats with large bows like armoured dragons stick into the marina walkways. On the way back from the pub you could easily lose a few teeth on a mouthful of bow and anchor. I have passed ones that stick two or three feet into the walkway.

Why do relatively few boaters and hire companies use springs on the river? Perhaps it adds another layer of



complexity for hire companies to an already frazzled first-timer's training session. Even so, it's amazing to see so many expensive boats doing damage to themselves and the pontoons for want of a simple mooring procedure.

#### **BOW AND STERN LINES**

In the sailing world I had been taught a few things about tying up boats. Bow and stern line – preferably very long and tied a good distance beyond

the bow and stern to allow for the rise and fall of tide – usually when tied to a quay wall. On a marina or pontoon that can rise and fall with the tide you don't need long bow and stern shore lines. But to stop the boat moving backwards and forwards you should always use springs. Or if you own a marina berth you can have a set of ropes made up and permanently on the jetty to hold your boat in a safe position. This is very common with racing boats that use the same berth all the time.

#### **SPRINGS ARE SIMPLE**

The essence of a spring is very simple. You take a rope from the stern shore cleat and tie it to the bow cleat of the boat. As the boat tries to go forward under the influence of the wind or the current this rope tensions and prevents the bow hitting the pontoon. Similarly, a rope from the bow shore cleat is tied to the stern cleat of the boat. As the boat tries to

## **LEGAL REQUIREMENTS ON LINES**

The Shannon Navigation (Construction of Vessels) bye-laws (1992) number 7 (1) states 'A vessel shall be equipped with bow and stern mooring lines appropriate to its tonnage and length and of sufficient length and tensile strength to moor it safely. The minimum length of such lines shall be 12 metres and their minimum diameter shall be 12 millimetres if they are made of nylon and 16 millimetres if they are made of polypropylene. A vessel shall carry at least one efficient anchor and chain (or cable or hawser) appropriate to the tonnage of the vessel. Anchors with their chains, cables or hawsers shall be stowed in such positions and shall have such other equipment as to enable them to be dropped or weighed quickly.'



move backwards under the influence of the wind or the current this rope tensions and prevents the boat moving backwards. You end up with a figure X rope pattern (see figure 2, below).

Most sailing boats – well small ones anyway – say 20 to 30 ft, don't have a cleat in the middle of the boat, but many river boats do. A simple way to spring your boat and stop it bumping into the pontoon is to take a stern rope from the cleat on your deck, tie it around the cleat on the pontoon then take it from there to the middle cleat on your boat. Wrap it around the

cleat on the boat and haul it in a bit. The boat will move backwards, pulling the bow away from the pontoon. When it is a safe distance away tie it off. This will stop the boat moving forward (see figure 1a, page 13).

Attaching the bow line from a cleat on the deck to a cleat on the pontoon and then taking the remainder to the middle cleat will provide a spring that will prevent the boat moving backwards (see figure 1b, page 13). This spring is less important, as in most marinas the boat

**Two great knots, the cleat hitch and the round turn and two half hitches, both explained with ease on [www.animatedknots.com](http://www.animatedknots.com)**

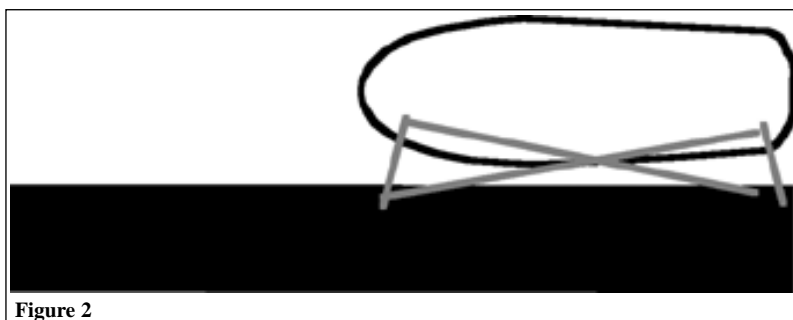


Figure 2

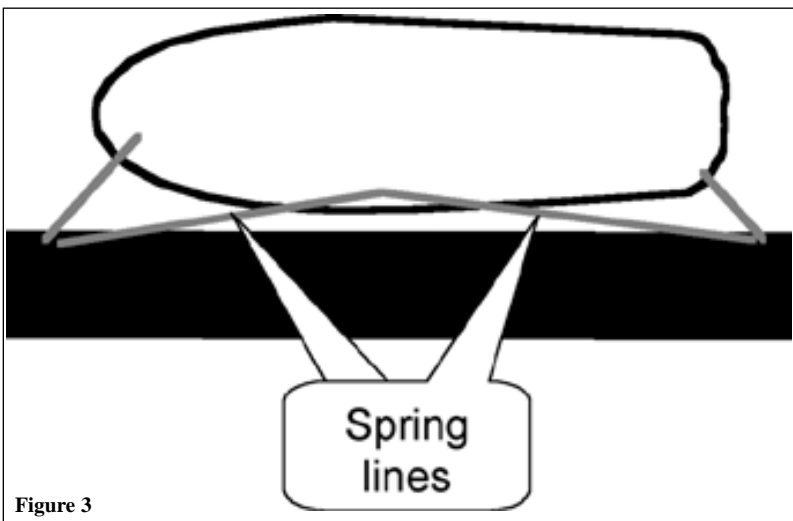


Figure 3

**'Why do boats with large bows stick into the marina walkways? On the way back from the pub you could easily lose a few teeth on a mouthful of bow and anchor'**

can move backwards a little without hitting anything.

In practice, a simple mooring procedure is to attach your bow and stern line, then use the rest of the stern line to provide a stern spring, and use the rest of the bow line to provide a bow spring (see figure 3 below). I like to leave the boat so that it floats off the pontoon and is not tied very tightly so that the fenders are crushed. Ideally, in my humble opinion, the boat should sit in the berth without the fenders touching the pontoon unless the wind or current is pushing the boat onto the pontoon. I know a lot of people tie up their boats so that they are as close to the pontoon as possible. They usually do this to minimise the gap between the boat and the pontoon to prevent crew, especially young children, falling in. So this is a matter of personal choice.

**TOWING ANOTHER BOAT**

Another essential place to use a spring is when you are towing another boat. You can tow it behind you, or better still, take it along side your own boat. Put on a bow and stern line and then two springs just as if you were tying up to a pontoon. When you are tying up the towed boat try to keep it parallel to your own boat and then tie it off. As you motor, the towed boat will try to pull off to the left or right and try to take your boat with it. The spring will tighten and stop the boat heading off and keep it in a straight line.

Also, if you are rafting up to other boats in a harbour then springs can prevent the boats being pulled out by the wind or the current. Ideally, all boats should have shore lines but on the river this may not be really necessary. However, good springs will stop extra pressure on the boat that is directly attached to the wall.

Lastly, I have found that it's better not to tie the boat up very tightly, especially in winter time, as the ropes fray and wear where they touch each other or where they overlap the deck or the pontoon. If the boat can move a little and let the ropes take the tension and then relax it reduces the risk of chaffing or breaking.

If you want to brush up on your knots then I recommend a great animated knot website: [www.animatedknots.com](http://www.animatedknots.com). This shows you how to tie lots of very useful knots, in particular the cleat hitch and the round turn and two half hitches. ■

*Richard Holbrook is a member of the IWAI.*