## SECTION XXI.

## ACCIDENTS TO SPARS, &c.

Braces are parted and spars sprung, as a rule, when the vessel is scending heavily. A sudden heavy scend puts a strain on gear all in a moment, and it is usually only a matter of moments if further damage is to be averted.

BOWSPRIT SPRUNG.—This would probably happen with the vessel either close hauled or with the wind well abeam. Hard up the helm, let fly spanker sheet or peak halyards, weather crossjack braces, &c., and get the ship before the wind *at once.* The next thing to do is to secure the masts. If the forestays set up abaft the knightheads, the lowermast is all right; but if they are set up to the bowsprit, they must be cast adrift, and, if possible, rove in through the hawse-pipes and set up to the windlass. But before casting anything adrift reeve a full fall in two cat-blocks, pass a hawser doubled over the lower masthead, and set it up with the cat-fall to a strop passed round under the stem close in. The jib and topmast stays must be served the same way, taking care to parcel them all well in the nip. Now get the fore and main topgallant masts on deck, and send the jibboom in, and you may then fish the bowsprit.

Instead of passing the stays through the hawse-pipes, they may be passed under the bowsprit, just outside the knightheads (being well parcelled), and set up on their ends. The jib and topmast stays might be set up to a chain strop passed under the bobstay bolts in the stem, if strong enough.

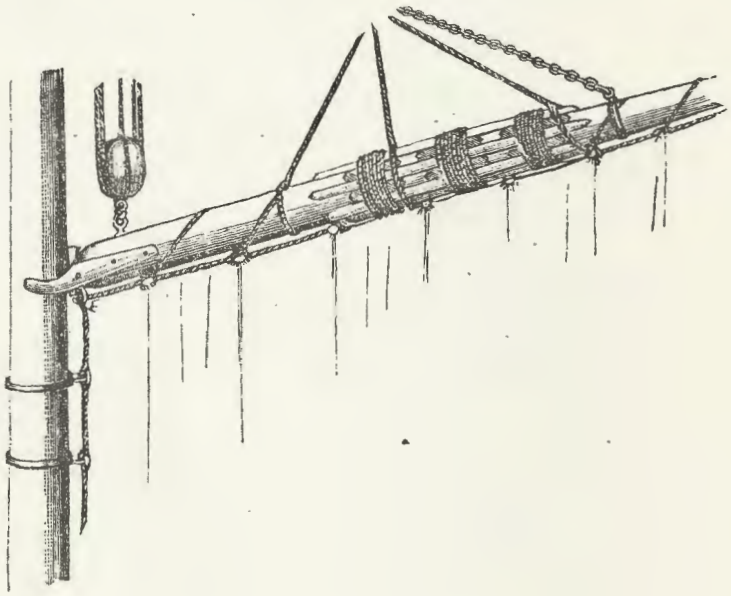
If the spring is not too bad, and the spar *well* fished, the two jibs and topmast staysail may be carried again, but it will be prudent to do without the flying jib, and keep the fore topgallant mast on deck for the remainder of the voyage, as so much depends upon the bowsprit that it is not wise to run any risks.

LOWER BRACE PARTED.—In these days of double topsails and iron yards damage seldom occurs from a lower brace parting; but should this accident happen running heavy, let run the lee topsail sheet, the tack of the course, and ease off the sheet. Keep the vessel dead before the wind, but mind that in the hurry she does not come by the lee.

Preventer braces are very valuable things when running heavy with a quarterly wind, and well repay the small extra work in reeving them.

If a yard is sprung by such an accident as this it must be fished.

This is not a difficult operation, and a yard so treated will stand perfectly well. Gaffs can, if sprung or carried away, be secured in a similar manner.* *(Plate No. 62.)*



Schooner's main gaff fished.

*Plate No. 62.*

To FISH A YARD.—Get sufficient small spars, shape them a little, that they may lay snug to the yard, place them round the yard, and fill in between them with chocks of wood, and then lash all together. The lashings should be of good small stuff, according to the size of the job. If the stretch has been taken out of it, all the better; if not, lay it on a stretch before using. When the lashings are hove as taut as possible, set them up still tauter by driving wedges under them, being careful the wedges do not cut the stuff. Then, supposing the yard is sprung in the quarter, it will be well to fit a preventer lift just outside the spring, and be careful to let both it and the standing lift take a strain.

* A lower yard is most likely to be sprung in the quarter outside the truss band. It will probably be a small crack *along* the yard on the after or lower part.

If it be a gaff that is sprung, the peak halyards should be hooked to a crow-foot set of strops, the two inner legs of which should take the fish, and the two outer ones the gaff at each side of it. Such an accident as a yard-arm wrung off may, if not too big a job, be keyed. *(See Plate No. 63.)* This is better and neater than a scarf for such a purpose.*

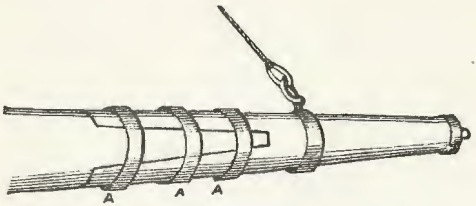



*Plate No. 63.*—Yard-arm keyed. *a. a. a.* Hoops.

STAY PARTED.—If a stay parts, keep the ship away and relieve the spar; send up a hawser, pass it round the masthead, and make a bowline knot in it with sufficient bight to form a large enough collar. Such a preventer stay will require a tackle kept on it for some days until the stretch is out of it.

If a topmast backstay carries away when by the wind, put the helm down, and let her come round; tack her if she will stay, if not, let her come round on her heel. Of course if it is blowing hard, with a high sea running, it will not be always practicable to resort to this manœuvre, in which case the topmast must be relieved as much as possible at once by taking in canvas, keeping the ship away, and bringing the wind on the other quarter.

Wire spans, or lengths of wire hawser, if such things are on board, are much better for preventer stays and backstays than rope. A large rope hawser used for this purpose is never done stretching, and will want careful attention for days.

LOWERMASTS GONE.—If so unfortunate as to lose the lowermasts, it is well to remember that a pair of sheers formed of light spars of good length will set a good sized square sail. The chief object in such a case will be to reach a port, and to this end the prevailing winds should be studied, as the vessel cannot work well to windward. A large 1,700-ton ship, that had to cut away her masts in the Bay of Bengal during a cyclone, having shifted her cargo and gone on her beam ends, made a port without much difficulty by using her spare topmast as a main mast, a pair of sheers as a fore mast, and a spare yard lashed to the stump of the mizzen mast for her mizzen mast.

* If you have plenty of good small chain on board, a fish may be lashed with this instead of rope. If it can be got well taut, there will be no stretch to it as in rope.

Book reading cannot do more than give hints as to procedure in cases of this kind; the seaman must learn by actual experience, and also be guided by the circumstances of the individual case.

A WOODEN SHIP'S STEM STARTED may be hove in place again thus:—Pass the two bower cables out through the hawse-pipes, and shackle them together outside the stem; parcel the stem well, get both chains taut, and heave on whichever cable will straighten the stem; when hove straight, heave in equally on both cables with the windlass till the stem comes back into its place.

A CHOKED PUMP, which cannot be hove up on deck to be cleared, may sometimes be got clear (when the lower box is drawn) by dropping the lead down a few times with the line attached.

TOPMAST SPRUNG.—If a topmast is sprung just above the lower cap it should be lowered till the sprung part is below the cap, cut another fid-hole, and shorten up the rigging, backstays and stays.

LOWER RIGGING WORKED SLACK IN A GALE.—Get a spar outside it on each side about a third of the way up from the deck, then frap them together across the ship with turns at every shroud. Wire rigging seldom requires this treatment.

DOWNHAUL PARTED.—If a jib downhaul parts in *moderate weather*, keep the ship off a bit and send out three or four hands to the jib-stay and haul it down.

FOOTROPE OF SAIL STRANDED.—Take a piece of rope as large as the footrope, make a knot in each end, seize this on the footrope with strong marline seizings, so that the stranded part comes in the middle of the stopper.

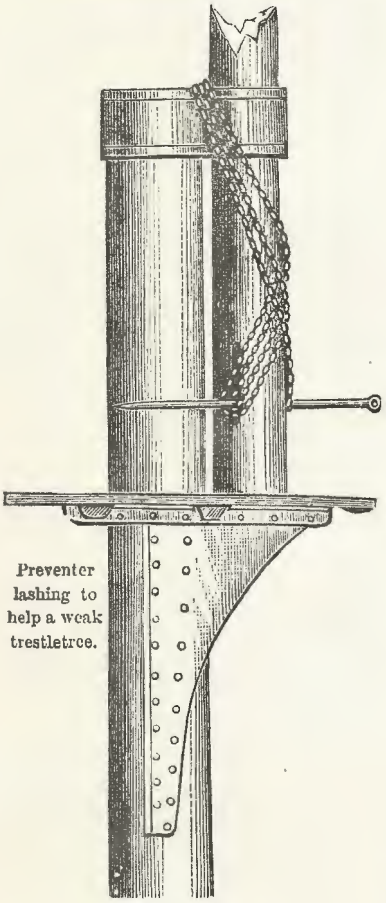
HAWSE-PIPE CRACKED.—Having ridden out a heavy gale, and the hawse-pipe is found to be badly cracked, the chain may be hove in by hanging a kedge anchor over the bows, close to the hawse-pipe, and, having secured it in this position, letting the cable lead over it whilst heaving in. This method may also be resorted to if it is noticed that the hawse-pipe is gone during the gale, as the kedge can be hove up to take the weight off the pipe, if opportunity is taken as the cable slacks.

SHIP DRIVING ON A LEE SHORE.—The *last* resource is to cut away the masts, but in this case leave a lower mast standing if possible, as you may require it to secure the Life-saving Brigade's hawser to.

LOWER CAP WORKED LOOSE OR CRACKED.—A cap worked loose may sometimes be tightened up by wedges; this will depend on the circumstances. If this cannot be done, the only thing is to put a lashing round masthead and topmast.

Take a length of good chain, a topsail sheet if you have nothing better, but a stouter chain is preferable; secure one end to the after side of the lower masthead if there is a suitable bolt there, now pass turns figure-of-eight fashion through the doublings, jerking each turn tight, heaving tight also with a capstan bar; get as many turns as possible, starting from below, and finish off with three or four frapping turns, which must be jerked and hove tight the same as the round turns. Secure well the end, and wedge up the lashing as hard as possible with good hardwood wedges entered from above.

TRESTLETREES SPRUNG OR WORKING DOWN.—Get a stout iron bar, such as an awning stanchion or a heavy crowbar, as large a bar in fact as you can get through the sheave hole in the heel of the topmast, which may be eased a little for the purpose. Reeve this bar through and fit a hardwood plug above the sheave to ease the strain on the pin. Take a length of good chain and pass *cross* turns over the out-hanging ends of the bar, and over the lower cap, passing the turns before the topmast, securing one end as a standing part, and setting up each turn with a tackle from the topmast head; pass good frapping turns and make fast. The turns should be kept close to the mast, *not out along the bar;* they may ride one over the other.



Preventer lashing to help a weak trestletree.

*Plate No. 64.*

Or a wire strop, as large as the sheave hole will take, may be fitted, one end shackled to the bolt in the cap, the other end set up and secured to the opposite side of the cap, but in this way you can only get one part of the wire to take all the strain.

PARRAL OF UPPER TOPSAIL OR TOPGALLANT YARD PARTED.—Get the sail aback, and for this purpose, if necessary, bring the ship to the wind. Do not start the sheets, but get the yard down on the lifts. If running in heavy weather and the topsail parral goes, keep the sail full, clap on the downhauls, and get the yard down on the lifts; the buntlines may then be unrove from the masthead and passed down abaft, but kept in the lizard, and used as guys to haul the yard to the mast. But mind, with an accident of this kind, to whatever sail it be, do not start the sheets.

If the weather-brace should go with the parral, it will be best, if possible, to get the wind on the other quarter, and lash the yard for the time being to the lee topmast rigging, and steady tight the topsail brace. This will keep the yard moderately quiet till you can repair the damage.

JIB-STAY PARTED.—Keep the ship dead before the wind, and lay the fore yard square; the sail can then be easily taken in, as it will lie becalmed.

LOWER TRUSS CARRIED AWAY.—A very rare accident in these days. Keep dead before the wind, up mainsail and steady well taut the braces. Up with two stout luff tackles, place the outer blocks well out on each quarter of the yard, and lash the inner blocks to the fore part of the mast, then heave both tackles taut; this will steady the yard whilst you repair the truss. The ship can now be brought to her course again.

JIBBOOM CARRIED AWAY.— Heave the ship to or you will be unable to get the wreck aboard, and the broken boom might go through the bows before you could clear away the wreck.