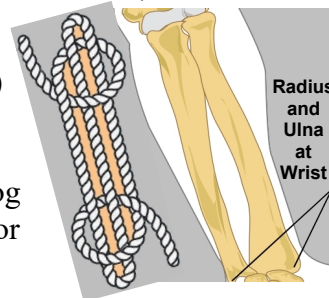


Why “Sheepshank”?

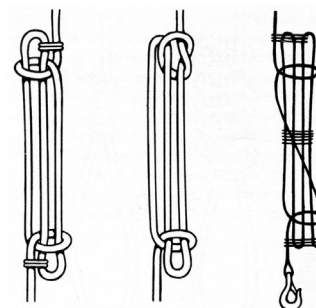
In some traditions, the sheepshank was called (after translation) a dogshank, catshank, trumpet knot, or daisy knot. No doubt many English-speaking sailors could recognise a sheep (or a dog), and many had eaten a sheep shank. Indeed, ships often started long voyages with farms on deck, including cattle, sheep, goats, pigs, poultry and vegetables; though these were consumed more often by officers than by sailors, who made do with salt beef and hard bread (Leslie, 1890).

In sheep, the resemblance to the knot can be seen best in fore-shanks (and it is clearer in dogs). If we take the two long bones (radius and ulna) as the spaces between ropes, and the flesh as the three lengths of the folded rope, we see a reasonable likeness of the knot (complete with expanded regions at each end). It is not necessary to bail up a sheep or dog to see this; just look at one’s own forearm. In some species the ulna and/or fibula are vestigial or fused to their partner bones; so it can be confusing.



Evidently, many early sailors (and landmen) had good spatial imaginations, perhaps developed by picturing the star constellations. They used knot names based on anatomical features of other animals including the butterfly, crow, lark and monkey. Sailors also had (sometimes multiple) rope-related uses for “bullring, bull’s eye, cat, cockbill, cow hitch, dog, dolphin, feather, fox, frog, goose neck, hog, horse, hounding, lizard, monkey face, mouse, ram’s horn, ratline, spider band, swallow, and worm” among animal-derived terms (Fox 1905, Ashley 1944, Toss 2016).

Manwayring (1623) wrote “Sheepe-Shanck is a kind of Knot, which they cast upon a Runner, when it is too long foe that it cannot hoyst in the Goods over the Ships-side unless it be shortened: and by this Knot, they can quickly fhorten-it up as much as they List (*please*), and instantly undo it againe”. Ashley (1944) pp. 207-208 described other historical uses, including striking the topgallant masts. According to Day (1947), Riesenbergs remarked in 1922 that the sheepshank was used about as often as the cross-bow. But Svensson (1940) was perhaps the most practical of the authors on seamen’s ropework. Discussing a simple block and tackle or ‘whip’, he explained: “On unloading whips, when beginning work at the hatch, it is often helpful to make a sheepshank just above the hook so as to retain the initially superfluous length of whip. This sheepshank is made with numerous bights, with half-hitches, and twine frappings around each end and a seizing round the middle (Fig 61). It is best to have the heaving part of the whip quite short and running through a swivel block above the deck. As one works progressively lower in the hold, or as the heaving parts become worn, a bight is taken out of the sheepshank which served to store the excess length of whip when operations started.”



Figs. 59, 60, 61 Various sheepshanks

Today all of this is largely superseded by steel cables on drums and powered cranes. The (half) sheepshank gained a new lease of life as the truckies hitch (sometimes called a dolly, probably not after the cloned sheep), but even this use is now largely superseded by the ratchet strap, or the simpler cam-buckle in some applications. Especially with synthetic ropes, alternatives are better for other ‘uses’ of sheepshanks (eg a butterfly knot to isolate damaged rope).

As an aside, Svensson used “Dog’s shank” in a different context, as an alternative to a “Cat’s paw” (Figs 74-76).

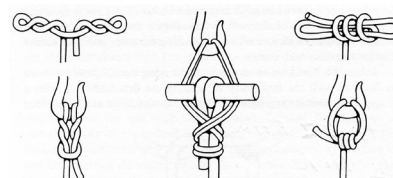


Fig. 74 Cat's paw

Fig. 75 Strop and toggle

Fig. 76 Dog's shank

Ashley CW (1944) *The Ashley Book of Knots*. Corrected Edition. Faber and Faber Limited, London. Hence *ABOK*.

<https://archive.org/details/TheAshleyBookOfKnots> G Budworth ed. (1993). ISBN 057109659X.

Day CL (1947) *The Art of Knotting and Splicing*. Dodd, Mead and Co. Inc., New York. Later editions updated and published by Naval Institute Press, Annapolis. The 4th Edition (1986) is ISBN 0870210629.

Fox CH (1905) *Manual of Seamanship for Boys and Seamen of the Royal Navy, 1904*. HMSO, London. Reprinted 2003 by Algrove, Ontario as ISBN 1894572785. See also subsequent editions of the *Admiralty Manual of Seamanship*.

Leslie RC (1890) *Old Sea Wings, Ways, and Words*. Chapman, Lond. <https://archive.org/details/oldseawingsways01leslgoog/>

Manwayring H (1623) *The Sea-mans Dictionary*. Ms copy by R Crane <https://catalog.hathitrust.org/Record/100577601>

Svensson S (1940) *Handbook of Seaman’s Ropework*. Adlard Coles, London. English transl. by Imrie 1971, ISBN 0229986544.

Toss B (2016) *The Complete Rigger’s Apprentice*. 2nd Edn. McGraw-Hill Education, New York. ISBN 9870071849784.

Lescallier (1777) Noeud de jambe de chien:

It is employed to shorten a line, to take up the rope of a hoist which was too long, &c.

Lescallier (1791) Noeud de jambe de chien:

This knot is used to quickly during work shorten a line that is too long, in order to make the power act in a shorter space, as to take again the action of a hoist which is too long, &c. The more we pull both ends, the more the knots tighten; & the rope, folded in three by its middle, you find it shortened twice the length given to the 'leg of dog'.

Röding (1794)



According to John Smith (1626) [Accidence for Young Sea-men](#) 'Sheeps Feet' was sometimes used as a term for a mast stay. This usage could be related to 'sheep shank', but it does not seem to have been widespread or sustained.

Used to shorten a rope that is too long, for example the runner of a tackle.

Steel (1794)

SHEEP-SHANK. A sort of knot made on backstays, &c. to shorten them.

Burney (1815), but Falconer (1769) has almost the same.

SHEEP-SHANK, (*jambe de chien; næud fait a l'usage d'un palan, &c. pour la raccourcir, Fr.*) a sort of knot made on a rope to shorten it, and is particularly used on runners or ties, to prevent the tackle from coming block and block. By this contrivance the body to which the tackle is applied may be hoisted much higher, or removed much further, in a shorter time.

Thus, if any weighty body is to be hoisted into a ship, and it be found that the blocks of the tackle meet before the object reach the top of the side, it will be necessary to lower it again, or hang it by some other method, till the runner of the tackle is sheep-shanked, by which the blocks will again be separated to a competent distance.

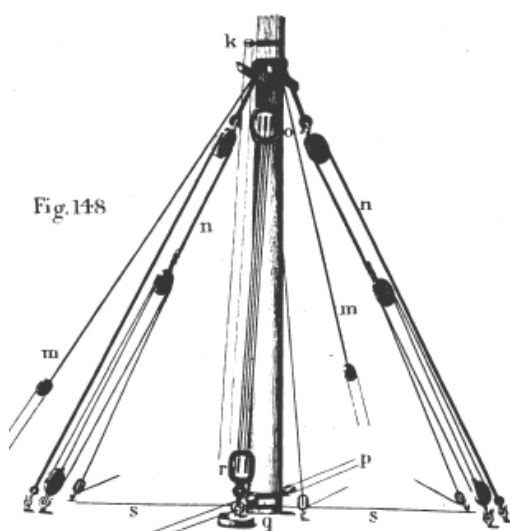
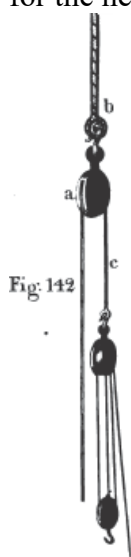
RUNNER, (*itage d'un palan, &c. Fr.*) a thick rope used to increase the mechanical powers of a **TACKLE**, which article see.

The runner passes through a large block, and has usually a hook attached to one of its ends, and one of the tackle blocks to the other; and, in applying it, the hook, as well as the lower block of the corresponding tackle, is fixed to the object intended to be removed.

Falconer elaborates (but unfortunately does not supply the promised fig. 10):

A tackle wherein both the blocks are moveable, and communicate with a runner, is represented by fig. 10. plate VIII. That part of the tackle which is fixed to one of the blocks, &c. is called the standing part; all the rest are called running parts; and that whereon the men pull when employing the tackle, is called the *fall*. The application of the tackle to mechanical purposes is termed *hoisting* or *bowssing*. See those articles.

If I follow this, the 'runner' has both (i) a rope tail (through a fixed block on the derrick, forming a single whip) and (ii) the top block of a moveable tackle (for a heavy lift from wharf or boat, into the ship). The bottom block of the moveable tackle is fastened to the load. If the moveable blocks come together (chock-a-block) before the load gets over the ship rail, secure the load temporarily by another (non-lifting) rope / hook, then separate the blocks (sheep-shanking the runner, if it is fixed) for the next lift. Not the same as Svennson, but also plausible to me for long and heavy lifts.



Here from [Lever \(1808\)](#) is a 'runner tackle' (Fig 142). Hmm, where will the sheep-shank go, and why?

Ahh, now we can see; if one end of the 'runner' goes to a deck ring (Fig 148), a sheep-shank might work per Falconer. See also Lever Figs 174, 199, 201; and *ABOK* #3244 'runner and tackle for setting up on a backstay'.

It may be confusing that the terms 'fall', 'runner' and 'whip' have all been applied with alternative meanings at various times in describing tackles.

Another insight from **Burney (1815)**: *pro tempore* (when masts are struck)!

To SHEEP-SHANK, (*raccourcir un cordage, Fr.*)
is also a term used to shorten the top-gallant backstays, &c. (*pro tempore*), when the masts are struck.

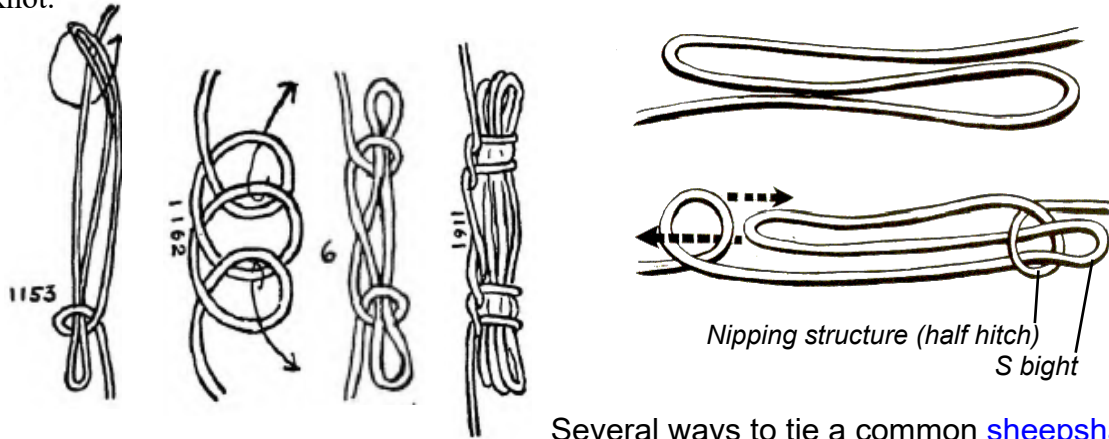
Now we know not to look for sheepshanks in the standing rigging. When lowering a mast by the backstay; I guess it was desired to keep the stay at the original length for later attachment, so it might be sheep-shanked (*pro tempore*) before attachment of a nearly chock-a-block tackle. If the tackle came close to maximum working length during the lowering, it would make sense to: (i) temporarily secure the backstay above the sheepshank (eg by rolling hitches or some other kind of nippers in a non-hauling role); (ii) bring the tackle back to chock-a-block by releasing or reducing the sheepshank; (iii) resume lowering. The process could be reversed to raise the mast. If Pythagoras indicated more length needed than existing backstay plus tackle working length, I imagine there would also be a runner or a pendant. If the available runners are long (with useful end-fastenings such as hooks or reinforced eyes) nothing needs to be cut; just use the sheep-shank. Or set up the 'runner tackle' (initially sheep-shanked on the fall) much like Fig. 148, except into the backstay like b in Fig. 142. It is essentially the same problem as when getting a load over the rail.

Ashley (1944) described an even simpler historical use: to tidily secure the backstay where it would soon be needed aloft, while the topgallant mast was temporarily struck, in anticipation of a blow.

All this was in the days of flexible cordage and tackles of course (not wire cables on drums driven by engines). Steam ships, steam engines and wire rigging all became popular from about 1840. Svensson warned that when he was writing, both fibre cordage and wire cables were used in rigging. Like the cross-bow, the sheep-shank probably once got a lot of use.

Terminology

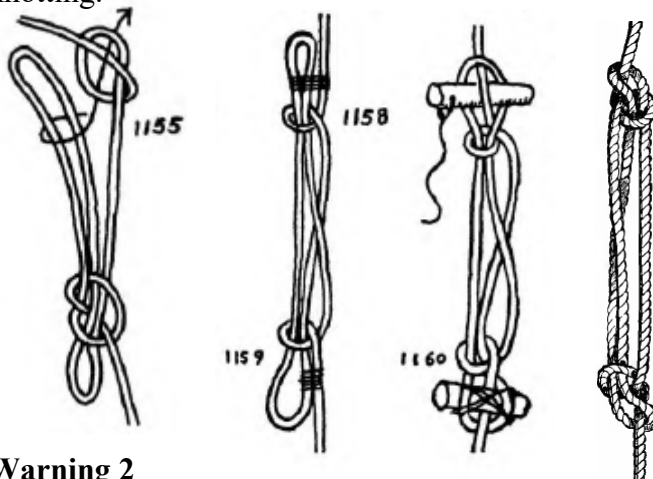
Sheepshanks can be tied several ways, and in any case it is not clear once tied which is the standing or working end. This creates ambiguity when discussing variant forms (for example, spaces in a thumb-knot nipping structure, or marlingspike versus slip knot or running knot / noose forms). Common features of all sheepshanks are: (i) shortening of a rope by folding into three (or 5, 7, 9, ...) lines, with (ii) S bights at each fold extremity secured by nipping structures towards the ends of the knot.



Several ways to tie a common [sheepshank](#)

Warning 1

Common sheepshanks become insecure when load is relieved, because the half hitches easily fall off the ends of the knot. In synthetic rope, sheepshanks may be [insecure](#) even under load, because of insufficient friction, allowing the S bights to slide through the hitches. Under [exceptional](#) circumstances, ability to collapse the knot by a flick on an unloaded standing part may be useful. Under all normal circumstances (if for some reason a sheepshank is to be used) one of the variants with more secure S bights and/or nipping structures should be preferred. Examples of such variants use marlingspike hitches to nip; and/or secure S bights using seizing, toggles, weaving or additional knotting.



Several sheepshank variants - more secure than the common [sheepshank](#).

Warning 2

If a damaged section of rope must be isolated, it is far preferable to use a true alpine butterfly (or lineman's loop) ABOK #1053 rather than a sheepshank. Sheepshank variants exist in which the S bights merely pass (as U-turns) over another line, rather than being nipped on both lines of the bight. In such a sheepshank, there is a great danger that a cut line will simply slide through the nipping structure under load. Therefore, if for some reason a sheepshank must be used to isolate a damaged section of rope, it is essential to check carefully that the structure nips both lines of the S bights at both ends of the knot. This is even more the case because some sheepshanks have protruding bights (eyes) near the nipping structures but the S bights merely pass over another line.



A [sheepshank](#) variant with mere U-turns of the S bights. Dangerous if used to isolate a damaged rope.