

RIGGING AND BENDING THE LOWER STUDDINGSAILS.

These sails are bent to a yard at the head, with rope-bands, the same as other sails.

OUTER-HALIARDS reeve through a span-block, fixt round the lower cap, and through a block at the lower yard-arm, Pl. II. fig. 20, and bend between the cleats of the studding-sail-yard; the other end leads down upon deck.

INNER-HALIARDS bend to the upper inner-crinkle on the head of the sail, then reeve through a tail-block made fast round the quarter of the lower-yard, and through another block made fast round the yard near the mast, and lead down upon deck.

TACKS bend to the outer clue on the foot of the sail, and reeve through a block lashed round the outer-part of the boom; they are carried aft, and lead through a block lashed to the main-chains, come through a port, and belay round a cleat in the waist. The other is carried forward, and reeves through a block lashed to the bees of the bowsprit. The main-studding-sail tack reeves through a block at the end of the boom, and through a block lashed to an eye-bolt in the buttock; and leads in through a snatch-block lashed on the quarter on each side.

SHEETS are doubled; the bight is put over, and the ends through the inner clue on the foot of the sail: one leads forward, the other aft.

The FORE-STUDDINGSAIL sets flying, or with a boom at the foot. If flying, the foot of the sail spreads on a yard that rigs with a span clinched round each yard-arm. A guy is bent to an eye that is crossed in the middle of the span, and leads aft through a block lashed to the main-chains, comes in through a port, and belays round a cleat in the waist. The sail, thus rigged, has no tacks.

BOOMS rig as follow: The hook in the inner end hooks to an eye-bolt in the aft-side of the cat-head, and the main-studding-sail boom to an eye in the iron strap on the fore-part of the main-channel: the end is confined down with a lashing to the chain-plates. The inner end of the fore-boom is confined down with a tackle made fast round the inner end of the boom, and the lower
block

block is hooked to an eye-bolt in the wale. The guy clinches round the middle of the boom, reeves through a block lashed round the spritsail-yard, and comes in upon the forecastle.

RIGGING AND BENDING THE TOPMAST-STUDDINGSAILS.

These sails bend to a yard at the head with rope-bands, or are laced, as the other sails, and the foot is spread upon the boom that slides out from the extremities of the main and fore yard through the boom-irons.

HALIARDS reeve through a block in the span round the topmast-head, under the cap, and through the jewel-block, Pl. II. fig. 21, that is strapt with a thimble through an eye-bolt in the extremities of the topfail-yards, and bend to the topmast-studdingfail yard: the other end leads down upon deck, and belays to the bow-line-bitts.

The **DOWNHAULER** reeves through a block lashed to the outer clue of the sail, and through a thimble on the outer leech: it is then made fast to the topmast-studdingfail yard, just within the ear-ring, and leads into the waist.

TACKS bend to the outer lower clue of the sail; they reeve through a block lashed to the outer end of the boom, and lead aft through a block at the gangway, and belay to a timber-head. Tack of the main-topmast studdingfail leads in upon the after-part of the quarter-deck through a block lashed upon the quarter.

SHEETS are doubled; the bight is put through the lower inner clue, and the ends through the bight. The after-sheet of the fore-topmast studdingfail leads in abaft the fore-shrouds. The main hauls in upon the waist. The fore-sheet of the fore-topmast studdingfail leads in upon the forecastle; the after one before the shrouds. On the middle of the boom is fastened a selvagee, or a strap with a thimble, to which is hooked the top-burton tackle, to support the boom in the middle.

The **BOOMS** are run out by the tackles. The strap of the double-block makes fast through a hole in the heel of the boom, and the outer-block to the boom-iron, and the fall leads along the yard.

RIGGING AND BENDING THE TOPGALLANT-STUDDINGSAIL.

This sail bends to a yard at the head, as before, and the foot is spread on a boom that slides out at the extremities of the topfail-yards.

The HALIARD reeves through a block seized round the head of the topgallant-mast, above the hounds, or rigging, then through the jewel-block, Pl. II. fig. 22, strapt with a thimble through an eye-bolt at the extremities of the topgallant-yards, and bends to the topgallant-studdingsail yard; the other end leads down the mast into the top, and belays there.

The DOWNHAULER makes fast to the outer yard-arm within the ear-ring, and leads down into the top.

TACKS bend to the outer lower clue of the sail, and reeve through a thimble in a strap round the outer end of the topmast-studdingsail boom; and, in merchant-ships that have no boom, through a thimble in a strap round the outer yard-arm of the topmast-studdingsail, and leads aft the tack of the fore-topgallant studdingsail to the main-chains. The main leads to the quarter-piece.

SHEETS are doubled; the bight is put through the lower inner clue of the sail, and the ends passed through the bight; one end leads forward, and makes fast to the quarter of the topfail-yard, and the other end leads into the top, and belays to the topmast-shrouds.

RIGGING