The heads of all four-ſided ſails, and the fore-leeches of lateen-ſails, are attached to their reſpective yard or gaff by a number of ſmall cords called *ro-bands*; and the extremities are tied to the yard-arms, or to the peek of the gaff, by earings.

The ſtay-ſails are extended upon ſtays between the maſts, whereon they are drawn up of down occaſionally, as a curtain Aides upon its rod, and their lower parts are ſtretched out by a tack and ſheet. The clues of a top- ſail are drawn cut to the extremities of the lower yard, by two large ropes called the *top-ſail ſheets*; and the clues of the top-gallant ſails are in like manner ex­tended upon the top-ſail yard-arms, as exhibited by fig. 2.

The ſtudding-ſails are ſet beyond the leeches or ſkirts of the main-ſail and fore-ſail, or of the top-ſails or top-gallant ſails of a ſhip. Their upper and lower edges are accordingly extended by poles run out beyond the extremities of the yards for this purpoſe. Thoſe ſails, however, are only ſet in favourable winds and moderate weather.

All ſails derive their name from the maſt, yard, or flay, upon which they are extended. Thus the princi­pal ſail extended upon the main-maſt is called the *main- ſail, d*; the next above, which ſtands upon the main-top malt, is termed the *main-top ſail, e*; and the higheſt, which is ſpread acroſs the main-top-gallant maſt, is named the *main-top-gallant ſail, f.*

In the ſame manner there is the fore-ſail, *g*; the fore top-ſail, *h*; and the fore-top-gallant-ſail, i; the mizen, *k*; the mizen top-ſail, l; and mizen top-gallant-ſail, *m.* Thus alſo there is the main-ſtay-ſail, *o;* main-top-maſt ſtay-ſail, *p*; and main-top-gallant ſtay- fail, *q*; with a middle ſtay-ſail which ſtands between the two laſt.

*N. B.* All theſe ſtay-ſails are between the main and fore-maſts.

The ſtay-ſails between the main-maſt and mizen-maſt are the mizen ſtay-ſail, *r;* and the mizen top-maſt ſtay-ſail, s; and ſometimes a mizen top-gallant ſtay-ſail above the latter.

The ſtay-ſails between the foremaſt and the bow- ſprit are the fore ſtay-ſail, *t*; the fore top-maſt ſtay-ſail u; and the jib, *x.* There is beſides two ſquare ſails extended by yards under the bow-ſprit, one of which is called the *ſprit-ſail, y;* and the other the *ſprit-ſail top-ſail, z.*

The ſtudding-ſails being extended upon the different yards of the main-maſt and fore-maſt, are likewiſe na­med according to their ſtations, the *lower, top-maſt,* or *top-gallant ſtudding ſails.*

The ropes by which the lower yards of a ſhip are hoiſted up to their proper height on the malts, are called the *jears.* In all other ſails the ropes employed for this purpoſe are called *hαliαrds.*

The principal ſails are then expanded by haliards, ſheets, and bowlines; except the courſes, which are al­ways ſtretched out below by a tack and ſheet. They are drawn up together, or truſſed up, by bunt-lines, clue-lines, *d d*; leech-lines, *e e*; reef-tackles, *ſſ*; ffab- line, *g*; and ſpiling-lines. As the bunt-lines and leech-lines paſs on the other fide of the ſail, they are expreſſed by the dotted lines in the figure.

The courſes, top-ſails, and top-gallant ſails, are wheeled about the maſt, ſo as to fuit the various directions of the wind by braces. The higher ſtud- ding ſails, and in general all the ſtay-ſails, are drawn down, ſo as to be furled, or taken in, by down-hauls.

Some experienced ſail-makers contend, that it would be of much advantage if many of the ſails of ſhips were made of equal magnitude; in which cafe, when neceſſity required it, they could be interchangeably uſed. For example, as the mizen top-ſail is now made nearly as large as the main top-gallant ſail, it would be eaſy to make the yards, maſts, and ſails, ſo as mutually to ſuit each other. The main and fore-top ſails differ about two feet at head and foot, and from one to three feet in depth. Theſe likewiſe could be eaſily made alike, and in ſome caſes they are ſo. The ſame may be ſaid of the main and fore top-gallant ſails, and of the mizen top-gallant ſail, and main fore-royal. The main-ſail and fore-ſail might alſo, with reſpect to their head, be made alike; but as the former has a gore at the leech, and a larger gore at the foot for clearing it of the gal­lows, boats, &c. which the latter has not, there might be more difficulty in arranging them. The difficulty, however, appears not to be inſurmountable. Theſe al­terations, it is thought, would be extremely uſeful in the event of loſing ſails by ſtreſs of weather. Fewer ſails would be thus neceſſary, leſs room would be requi­red to ſtow them, and there would be leſs danger of con- fuſion in taking them out. But perhaps the utility of theſe alterations will be more felt in the merchant-ſervice than in the navy, which latter has always a large ſtore of ſpare ſails, and ſufficient room to ſtow them in or­der. Thus, too, ſpare yards and maſts might be con- ſiderably reduced in number, and yet any caſual damages more eaſily repaired at ſea. Top-maſt ſtudding ſails are occaſionally ſubſtituted for awnings, and might, by a very little attention in planning the rigging of a ſhip, be ſo contrived as to anſwer both purpoſes. See Ship-building.

Sail is alſo a name applied to any veſſel beheld at a diſtance under ſail.

*To ſet Sail,* is to unfurl and expand the ſails upon their reſpective yards and ſtays, in order to begin the action of ſailing.

*To Make Sail,* is to ſpread an additional quantity of ſail, ſo as to increaſe the ſhip’s velocity.

*To /horten Sail,* is to reduce or take in part of the ſails, with an intention to diminiſh the ſhip’s velocity.

*To Strike Sail,* is to lower it ſuddenly. This is particularly uſed in ſaluting or doing homage to a ſuperior force, or to one whom the law of nations ac­knowledges as ſuperior in certain regions. Thus all foreign veſſels ſtrike to a Britiſh man of war in the Britiſh ſeas.

SAILING, the movement by which a veſſel is wafted along the ſurface of the water, by the action of the wind upon her ſails.

When a ſhip changes her ſtate of reſt into that of motion, as in advancing out of a harbour, or from her ſtation at anchor, ſhe acquires her motion very gradually, as abody which arrives not at a certain velo­city till after an infinite repetition of the action of its weight.

The firſt impreſſion of the wind greatly affects the velocity, becauſe the reſiſtance of the water might deſtroy it; ſince the velocity being but ſmall at firſt, the