deck ; then ſet up the perpendicular the height of the wing tranſom, and draw a level line, and where that line interſects, the line firſt drawn will be the aft side of the wing tranſom : on the upper, part of the middle line ſet off from that place the diſtance of the aft side of the ſtern-poſt ; ſet off alſo the diſtance of the after part from the rabbet on the upper edge of the keel, and a line drawn through theſe two points will be the aft side of the poſt. A line drawn parallel to the firſt drawn line at the diſtance of 4 1/2 inches, the thickneſs of the plank on the bottom, will be the aft side of the rabbet : and hence the ſtern-poſt is deſcribed, except the head, which will be determined afterwards.

From the dimenſions take the ſeveral heights of the tipper deck above the gun-deck, afore, at midſhip, and abaft, and ſet them off accordingly ; though theſe points deſcribe a curve, which will be the under side of the upper deck ; deſcribe alſo another curve parallel thereto, at the diſtance of the thickneſs of the plank, and the upper deck will be then repreſented at the middle line of the ſhip.

Set off the height of the lower counter, at the mid­dle line, from the upper edge of the keel, and draw a horizontal line with a pencil ; then on the pencil line ſet off the diſtance the touch of the lower counter is abaſt the aft side of the wing tranſom : from this point to that where the fore part of the rabbet of the ſtern- poſt interſects the line drawn for the upper part of the wing tranſom, draw a curve at pleaſure, which curve will repreſent the lower counter at the middle line. The height of the upper counter is then to be ſet off from the upper edge of the keel, and a horizontal line is to be drawn as before, ſetting off the diſtance the touch of the upper counter is abaft the aft side of the wing tranſom ; and a curve deſcribed from thence to the touch of the lower counter will form the upper counter at the middle line.

Both counters being formed at the middle line, the up­per part of the ſtern timber above the counters is to be deſcribed as follows : On the level line drawn for the up­per side of the wing tranſom ſet off the diſtance of the aft side of the ſtern timber at the middle line from the aft side of the wing tranſom, at the height of the top- timber line, and erect a perpendicular : then upon this perpendicular, from the upper edge of the keel, ſet off the height at the middle line of the top-timber line at the after side of the ſtern timber ; through this point draw a ſtraight line to the touch of the upper counter, and the upper part of the ſtern timber will be deſcribed.

As the ſtern rounds two ways, both up and aft, the stern timber at the side will conſequently alter from that at the middle line, and therefore remains to be re­preſented. Take the round up of the upper counter from the dimenſions, and ſet it below the touch at the middle, and with a pencil draw a level line ; take alſo the round aft, and ſet it forward from the touch on the touch line, and ſquare it down to the pencil line laſt drawn, and the point of interſection will be the touch of the upper counter at the side. In the same manner find the touch of the lower counter ; and a curve, similar to that at the middle line, being deſcribed from the one touch to the other, will form the upper counter at the side.

Take the round up of the wing tranſom, and ſet it off below the line before drawn for the height of the wing tranſom, and draw another horizontal line in pen­cil : then take the round aft of the wing tranſom, and ſet it forward on the upper line from the point repre- ſenting the aft side of the wing tranſom ; ſquare it down to the lower line, and the interſection will be the touch of the wing tranſom : then a curve, ſimilar to that at the middle line, being drawn from the touch of the wing tranſom to the touch of the lower counter at the side, will be the lower counter at the side. Draw a line from the upper counter upwards, and the whole ſtern timber at the side will be repreſented. But as the ſtraight line drawn for the upper part of the ſide tim­ber ſhould not be parallel to that at the middle line, its rake is therefore to be determined as follows.

Draw a line at pleaſure, on which ſet off the breadth of the ſtern at the upper counter ; at the middle of this line ſet off the round aft of the upper counter, then through this point and the extremities of the ſtern de­ſcribe a curve. Now take the breadth of the ſtern at the top-timber line, and through the point where that breadth will interſect the curve for the round aft of the ſtern draw a line parallel to that firſt drawn, and the di­ſtance from the line laſt drawn to the curve at the mid­dle of the fine is the diſtance that the ſide timber muſt be from the middle line at the height of the top-timber line.

The ſheer is to be deſcribed, which is done by ſet­ting off the heights afore, at midſhips, and abaft, and a curve deſcribed through theſe three points will be the ſheer. But in order that the ſheer may correſpond exactly with the dimenſions laid down, it will be neceſſary to proceed as follows : The perpendicular repreſenting timber dead flat being already drawn, ſet off from that the diſtances of the other frame timbers, which is double the room and ſpace, as the frames are only every other one ; and erect perpendiculars, writing the name under each : then on each of theſe perpen­diculars ſet off the correſponding heights of the top- timber line taken from the table of dimenſions for conſtructing the bodies ; and through theſe points a curve being deſcribed, will repreſent the ſheer of the ſhip or top timber line agreeable to the dimenſions.

The quarter-deck and forecaſtle are next to be de­ſcribed, which may be done by taking their reſpective heights and lengths from the dimenſions, and deſcribing their curves. In the ſame manner alſo, the round- houſe may be drawn. The decks being deſcribed repreſenting their heights at the middle, it is then necessary to repreſent them alſo at the ſide. For thia purpoſe take the round of the decks from the dimen­ſions, and ſet them off below the lower line drawn for the middle, and a curve deſcribed both fore and aft, obſerving to let it be rather quicker than the former, will be the repreſentation of the decks at the ſide.

The ports come next under conſideration. In the placing of them due attention muſt be paid, ſo as to preſerve ſtrength ; or that they ſhall be so dispoſed as not to weaken the ſhip in the leaſt, which is often done by cutting off principal timbers, placing them in too large openings, having too ſhort timbers by the ſide of them, &c. The frames repreſented by the lines al­ready drawn muſt be firſt conſulted. Then with a pencil draw two curves, for the lower and upper parts of the lower deck poſts, parallel to the line representing the lower deck ; the diſtances of theſe lines from