THE COMMON OR GARDEN PLANK.

By Nige Dale.

Whenever I look at pictures of boats whether they have been photographed, are within paintings by naval artists, of pencil or charcoal sketches or town crests, I sometimes contemplate that the images and origins of these boats I am looking at are similar. In considering the question of whether boats evolved from a common entity, we have to conclude that we will never be able to answer that question with any reasonable amount of certainty. But there are similarities in some of the boats from across a wide area of the European Continent and the world beyond, particularly in the long and thin type of boat, and no less so, than the more bulky vessels associated with the merchant trade of the middle ages.

Historically, and in the present, (and arguably with a break of the middle ages and renaissance period,) these long thin types of boat are more associated with the military, and the bulky boats with trade, it may have not been always this way, but what are the origins of these hull forms. The parallels that can be drawn from a Log boat as an ancestor of the long and thin boats are obvious, and it is estimated that the Log boat was in production from the early iron age in Europe for marine transport. The evolution from Log boat to Dugout boat is a fair assumption to make, but the subsequent evolution from Dugout craft to a plank hulled boat is a little more difficult to explain, and any probable link to those evolutions are either missing or haven't been identified yet.

The civilisations of Eastern Europe emerged from the Iron Age before the civilisations of Western Europe, and with this emergence came the written word and record. We know of the Greek and Phoenician ships of 700-800 BC., and the Roman vessels from that period onto about 400 AD., all noted within documentation and the records of historic events. If you review the information about ancient Phoenician, Greek or Roman merchant ships they have their similarities, where (you could argue), once you find a practicable and serviceable product, and unless there is a very good reason for doing so, there is no need to change the concept. The basic design of a trading Cog is not too dissimilar to the trading Greek, Phoenician and Roman vessels, so the basic design principles must have been sound, that is, length, width and sheer height.

The diversity and evolution of boat styles and uses I attribute to the advent of the plank. I denote advent as; when the concepts and principles of the uses of the plank arrived within civilisations as the

time of notable occurrence, because from that point everything changed as far as boat building and their potential uses were concerned. The propensity to build a variety of vessels offering the diversity of uses, opened the human imagination onto wider possibilities previously restricted by the limitations of the log boat and dug out parameters. Prior to the development of the wood saw, logs could be turned into planks by the use of wedges and mallets to split the logs and with use of axes to finish the plank blanks into the forms required to build a boat.

As boat building evolved, and with it the knowledge of which tree and its wood was the best for each application, so the skills and the trades of the builder grew. The craftsmen learnt how to achieve the best plank criteria for each type of vessel to be built, and became more attuned to the requirements of that vessels final use. Fine long timbers, for the long thin boats that required speed and agility, opposed to good stout timbers to make the sturdier vessels that needed to carry vast weights across sometime turbulent waters.

The necessity of a root part or a part from which the boat is built gave rise to another plank of a greater size and form, often joined together in sections to form what we refer to as the keel. The timbers of a boat, including the keel are referred to by other names than plank, to avoid any confusion between these timbers and other planks of the boat. The nomenclature associated with boats and their individual parts form a language all of its own. The nautical term for a plank fitted to the hull of a boat is a strake, but even this definition has its variations when a particular strake has a particular position within the hull construction.

For example, the strakes immediately adjacent to, and either side of the keel are referred to as the Garboard Strakes, the subsequent strakes could be referred to as the Bottom, the Lower, and or the Bilge strakes, then moving up from the bottom of the boat and on to the sides of the boat these are referred to as the Uppers, and the Topside strakes. The last strake or plank on a side of a boat at its uppermost point is the Sheer Strake. On some boats there is a Rubbing Strake, this plank or strake is narrower than all the other strakes but thicker in depth. It is generally fitted prior to the Sheer Strake and because of its thicker depth, protrudes beyond the line of the rest of the hull thus offering a surface against which the boat may rub a quay and not damage the rest of the hull, hence rubbing strake.

The construction of a boat by laying in of the strakes is generally achieve by the use of one of two methods, the first method is the skeleton method where the planks are attached to, and follow a line of internal ribs which determine the final shape of the boat. This method appears to be the style which is more widely used for the building of merchant vessels, as it offers the strength of a supporting frame work prior to the installation of the larger planks associated with the building of merchant vessels. The second method is the shell method where the initial planks are installed, and then some rib sections are installed to hold the basic shape. The

planking then proceeds to form the hull, held into position by further ribs until the boat achieves the final shape the builder requires, this style of build is epitomised by the shape of the Viking Drakkar.

The planking that forms the hull has two basic styles of fitment, one is a Clinker construction and the other is the Carvel construction. The Clinker construction also known as a Lapstrake construction as the strakes over lap at the edges. The Clinker build development is generally attributed to the northern parts of Europe, particularly from the Scandinavian, Anglo Saxon, Frisian countries. The hulls of a clinker built vessel tend to be a round bottomed, and although a clinker plank may be a wider plank to accommodate the overlap, the boats are generally a lot lighter and therefore faster.

The Carvel construction is where the planks are laid edge to edge on a predetermined ship framework, with any ensuing gap between the planks filled with a caulking to form a water tight seam. This system of planking is thought to have been developed from early Mediterranean boat construction of a Mortise and Tenon joint or another style as in sewing the planks together to form the joint. Although some of the earlier methods would appear to be a better principle for a hull construction, it would take a lot longer to build and would need a more skilled labour force to achieve than the edge to edge fitment. The advantages of a carvel hull opposed to a clinker built hull, is that the Carvel hull can offer a greater flexibility to the mast and sail configuration, and also a greater flexibility of the loads it can bear. The Carvel boat is not limited in the sizes of vessel that could be built by this method. A benefit of larger (carvel) vessels is that; as they get bigger in external dimension, the displacement weight is reduced allowing a greater carrying capacity for the vessel.

Whenever I look at pictures of boats I am also drawn to the lines of the vessels depicted, and what are and why are they called the lines? Is it because of the lines produced by the planks of the boats construction? or more mundanely, the entity between two fixed points ie, the stem and the stern. From early drawings and on town seals the planks of the boat add character and definition to the view. As an individual component of a boat, a house, a table etc, the plank can be quite an uninteresting piece of wood when stacked unceremoniously within a pile of timber, but when joined or assembled with other planks by hands with skill, the plank can become part of something quite splendid, and no longer to be recognised as a common or garden plank.