

been fully tried upon a considerable scale, and is found to possess advantages beyond the inventor's most sanguine expectations. It combines strength with lightness in a degree far exceeding any other boat; it is quite submergible, being light even when full of water, and freeing itself very rapidly. It shuts into one-fifth of its beam,—*e. g.* a boat ten feet wide shuts into two feet. The expansion is effected in *one second* entirely by its own weight, and when expanded, oars, masts, sails, etc., are all found in their places.

"It is a most excellent sea-boat, pulling very lightly, and in sailing, especially on a wind, it is superior to every other boat of equal draught.

"It is stowed outboard, frapped to by girdles against the ship's bulwarks or hammock nettings, and there presents scarcely anything for wind or sea to act upon. Owing to its extreme lightness and small dimensions when stowed, the very largest boats (even big enough to carry 500 persons) may be carried outboard without inconvenience.

"Such is a brief enumeration of some of its qualities and peculiarities; we will proceed next to state the manner in which the Fareham life-boat is constructed.

"The framework, which is of wood, American elm, is composed of broad, thin, and flat timbers running fore and aft; these are all joined together at the ends with a peculiar but simple *chain hinge*. The boat shown in the engraving has eleven such timbers, five on each side the keel; when shut, these all lie side by side like the leaves of a closed book; and when open, they assume the positions of planes radiating from a common axis.

"On each of the edges of these timbers is stretched a covering of strong thick felt coated with india-rubber; thus the boat is doubled into ten longitudinal cells or compartments all distinct and separate, so that injury to one does not affect the buoyancy of the others.

"The ends of the timbers all abutt against a semi-cylindrical block at each end, which, in addition to other advantages, closes the apertures at which the air enters the cells.

"The platform, which is jointed along the middle, is jointed also to one pair of timbers, and all the thwarts similarly to another. These compose the chief extenders of the boat.

"The great strength, which is truly astonishing, is owing to the *plank-on-edge* principle; these radial planes combining together to produce extreme rigidity; while the two coverings binding the edges of the timbers in every direction, a structure is produced far exceeding anything else in the combination of strength with lightness.

"It should be well observed that, though so light, this boat is extremely stiff and quite unequalled in weatherly qualities, depending upon the peculiar form which the bottom takes when in the water. The slightly elastic material yields a little, and rises in *faint grooves* between the timbers, immensely increasing the lateral resistance. The finest and most beautiful lines can be easily obtained upon this principle. The expense of these boats is less than other life-boats."

MODEL OF THE ARCTIC REGIONS. (From the "Illustrated London News.")

"We have been much pleased and instructed by a visit to a model of the Arctic regions, in a room devoted to it in Mr. Wyld's exhibition of the Globe, in Leicester-square. It shows the physical construction of that part of the world, and exhibits the elevations on the surface as in nature. The route of the Franklin missing vessels is also laid down with plainness and accuracy, in such a way as to be easily traced and understood. The investigation will prove interesting to the inquirer, besides being in itself a work of high art, implying infinite elaboration, both in detail and as a whole."