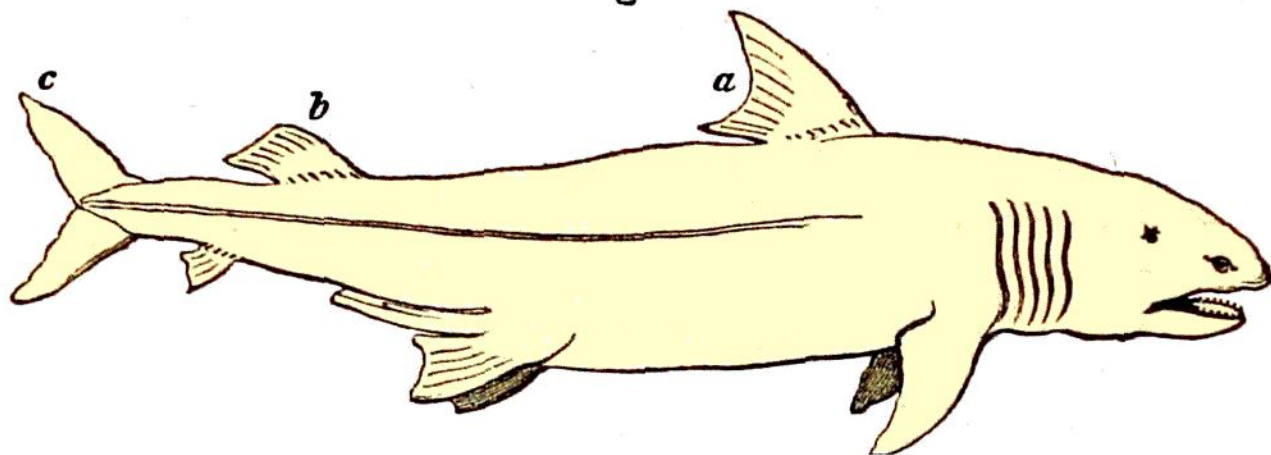


water, or as stuffed in a museum. The annexed figure represents the outline of the *Squalus maximus*, of which when immersed, but swimming near the surface, three points only could be seen above water at the same time, namely, the prominence of the back, with the first dorsal fin, *a*; secondly, the second dorsal fin, *b*; and thirdly, the upper lobe of the tail, *c*.

Fig. 3.



*Squalus maximus*, Basking Shark, or Hockmar.  
a. First dorsal fin; b. Second dorsal fin; c. Caudal fin.

Dr. Melville informed me that he once saw a large species of shark, swimming at the rate of ten miles an hour, in Torres Strait, off Australia; and, besides the lateral flexures of the tail, which are the principal propelling power, the creature described as it advanced a series of vertical undulations, not by the actual bending of the body itself, but by the whole animal first rising near to the surface and then dipping down again, so that the dorsal fin and part of the back were occasionally lifted up to a considerable height. Now it strikes me, that if a very huge shark was going at the rate of twenty miles an hour, as stated by some of the observers, that portion of the back which emerged in front might easily be taken for the head, and the dorsal fin behind it for the mane; and in this manner we may explain the three projecting points, *a*, *b*, *c*, fig. 1, p. 109, given in the drawing, sketched from memory, by Mr. Barry of Nova Scotia. The smaller undulations seen by the same person, intervening between the three larger, may very well be referred to a series of waves raised in the water by a rapid passage through it of so bulky a body. Indeed, some of the drawings which I have seen