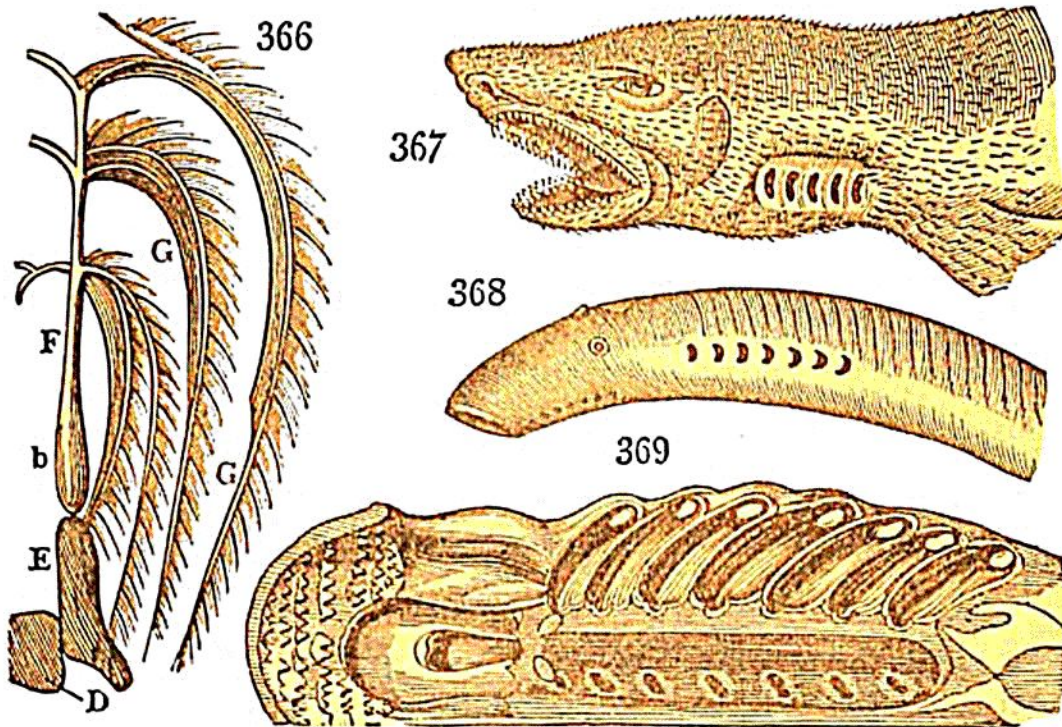


tion assumes a higher importance. In fishes the gills form large organs, and the continuance of their action is more essential to life than it appears to be in any of the inferior classes: they are situated, as is well known, on each side of the throat in the immediate vicinity of the heart. Their usual form is shown at *g g*, Fig. 366, where they are repre-



sented on one side only, but in their relative situations with respect to the auricle (*d*,) and ventricle (*e*,) of the heart; the bulbus arteriosus (*b*,) and the branchial artery (*f*,) They have the same fringed structure as in the mollusca, the fibres being set close to each other, like the barbs of a feather, or the teeth of a fine comb, and being attached on each side of the throat, in double rows, to the convex margins of four cartilaginous or osseous arches, which are themselves connected with the jaws by the bone called the *os hyoides*. 'The mode of their articulation is such as to allow each arch to have a small motion forwards, by which they are separated from one another; and by moving backwards they are again brought together, or collapsed. Each filament contains a slender plate of cartilage, giving it mechanical support, and enabling it to preserve its shape while moved by the streams of water which are perpetually rushing past. When their