bath sponge appears as a dark-coloured, irregular or sometimes cup-shaped mass attached by the under surface to the sea-bottom. The outer surface is covered by a skin or dermal membrane, elevated in innumerable minute conuli by the growing apices of the primary

skeleton fibres. This skin is pierced by a vast number of inhalant dermal pores of microscopic size, and by a much smaller number of comparatively large vents or oscula. When the sponge is removed from the water the soft tissues rapidly decay and leave behind only the elastic "horny" skeleton, which is what we usually

speak of under the name "sponge." It consists of a very close network of spongin fibres (closely resembling silk in chemical composition), some of which, known as primaries, run towards the surface at fairly regular intervals, while others, known as secondary

fibres, connect the primaries in all directions and themselves branch and anastomose freely. The primary fibres contain particles of sand or foreign spicules which are taken in by their growing

apices at the surface of the sponge, and the presence of which may greatly injure the quality of the sponge. The connecting fibres are only about 0∙035 mm. in diameter, or even less, and the primaries are a little thicker, while the meshes between the fibres are so narrow as to permit of the soaking up of water by capillary attraction,