

Hab. "On the under side of stones. Lochmill-loch, Fife," *Fleming*. "Not unfrequent in a rivulet of beautifully clear water, at Norton, in the county of Durham," *John Hogg, Esq.*

"Stem extending several inches, irregularly branched, slightly enlarging towards the aperture, dilatible; tentacular margin divided into two lobes, tentacula ciliated in opposite directions. Besides a gullet, stomach, and gut, there is a distinct rectum, terminating in a tubular orifice seated externally to the tentacular margin, out of which I have witnessed the remains of the food swallowed but a short time before forcibly ejected." *Fleming*.

2. *P. GELATINOSA*, "*free, branched; tentacula circularly disposed.*"—Rev. Dr Fleming.

Tubularia gelatinosa, Pall. Elench. 85.—*Plumatella gelatinosa, Flem. Br. Anim. 553.*

Hab. "Found along with the preceding," *Fleming*.

"Height about two inches, tufted, shrubby; stem dichotomously branched, scarcely enlarging at the extremity; polypi with a bell-shaped disk, the tentacula regularly disposed, and appearing as if webbed at the base; mouth with a valve." *Fleming*.

3. *P. SULTANA*, *irregularly branched; tentacula campanulate.*
J. G. Dalyell.

Tubularia sultana, Blumenb. Man. 272. pl. 1. fig. 9. Bosc, Vers, iii. 93.

Hab. Fresh water. Near Foulden, Berwickshire, *Dalyell*.

Polypidom irregularly branched, about an inch in height, earthy brown, roughish and opaque, the tubes short, cylindrical and unjointed; polypes entirely retractile, with about 20 slender white tentacula, assuming when expanded a regular campanulate figure. Blumenbach says they are ciliated at the base.

As I have already stated, Raspail considers the *Plumatellæ* (with the exception of *P. sultana*, which he does not mention,) to be merely states of the *Alcyonella*,*—an opinion which future inquiries may shew to be true, but at present there are some difficulties in the way of its adoption. Pallas had examined both the *Polypes-à-panache* of

(not Bull. des. Sciences Nat.) p. 157, no. 81, an 12 (de la Republique)=1804, belonging to an extract from a memoir by Vaucher on the fresh-water *Tubulariæ*: there fig. 1. much resembles the polypary in its natural state, but the animal magnified is not near so like as that figured in the former work: however neither plates do justice to the polypes."

* Mr J. E. Gray, in 1832, says, "It is probable that the *Plumatellæ* may be only the young of the *Alcyonellæ*." Syn. of Brit. Mus. p. 75.