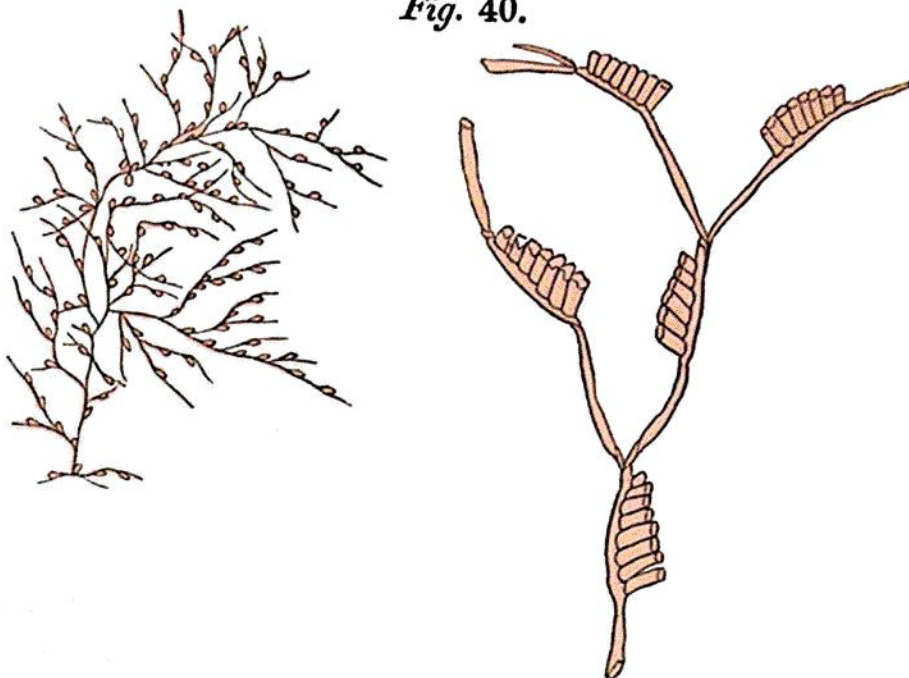


*Fig. 40.*



## IV. ZOOPHYTA ASCIDIOIDA.

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### FAMILY IX. VESICULARIADÆ.

Since we profess to be guided, in the classification of zoophytes, by similarity in the structure of the polypes considered independently of their polypidoms, the Vesiculariadæ, notwithstanding their apparent dissimilarity, must be associated in the same order with Alcyonidium and Flustra. They have been hitherto united with the Sertulariadæ, and previous to our knowledge of their polypes, this seemed a very natural union, for the polypidoms of both are slender and plant-like, horny, fistular and flexible, and furnished with somewhat similar cells on their branches. But the differences between them even in outward aspect are not inconsiderable, and although it may be difficult to point out these by any description, they are nevertheless not the less obvious to one familiar with the objects. The polypidoms of the Vesiculariadæ are more flexible and of a thinner texture, less arboreal and more confervoid, not so regularly jointed, nor ramified in the same determinate and fixed manner. They are all marine productions, generally not more than an inch or two high, and are found attached only to sea-weeds or other corallines.

For a knowledge of the animated tenants of these structures we are indebted to Cavolini, the Rev. Dr Fleming, J. V. Thompson, Esq. and more particularly to Dr Farre, of whose researches a summary has been given in the preliminary observations. The following is his description of the cells in the present family :

“ The transparent horny cell which closely embraces the body of the animal is nearly unyielding in its lower two-thirds, but terminates above by a flexible portion, which serves to protect the upper part of the body when the whole is