



FIG. 1.—*Pedicellina australis* Ridley. Falkland Islands. Brit. Mus. (N.H.). 1935.3.16.11.

*Pedicellina* zoids arise at intervals from a stolon which frequently branches at their bases. The zoids are usually separated by septa in the stolon and there is often a barren stolon segment between two zoids. The stalk is provided with a sub-epidermal sheath of longitudinal muscle, the degree of development of which varies between species. Cuticular spines are often present. The bell-shaped calyx is separated from the top of the stalk by a septate constriction. A circular lophophore of tentacles surrounds an atrium and is considered morphologically as ventral. The tentacles are united at their bases by a velum which contains a circular band of muscle, contraction of which enables the calyx to be closed with the tentacles folded inside the atrium. Tentacles are ciliated on their inner surface, the tracts joining to produce a ciliated groove leading to the mouth. The U-shaped gut is situated in the median plane. The stomach is more or less globular, conspicuously filling most of the calyx. A short intestine leads to the rectum, which often projects as a papilla. Colonies appear unisexual, but may perhaps be protandrous hermaphrodites.