

flattened calcareous joints; it may be snapped over at the point of junction between any two of these joints, and by slipping the point of a pen-knife into the next suture a single joint may be removed entire. The joint has a hole in the centre, through which one might pass a fine needle. This hole forms part of a canal filled during life with a gelatinous nutrient matter which runs through the whole length of the stem, branches in a complicated way through the plates of the cup, and finally passes through the axis of each of the joints of the arms, and of the ultimate pinnules which fringe them. On the upper and lower surfaces of the stem-joint there is a very graceful and characteristic figure of five radiating oval leaf-like spaces, each space surrounded by a border of minute alternate ridges and grooves. The ridges of the upper surface of a joint fit into the grooves of the lower surface of the joint above it; so that, though from being made up of many joints the stem admits of a certain amount of motion, that motion is very limited.

As the border of each star-like figure exactly fits the border of the star above and below, the five leaflets within the border are likewise placed directly one above the other. Within these leaflets the limy matter which makes up the great bulk of the joint is more loosely arranged than it is outside, and five oval bands of strong fibres pass in the interspaces right through the joints, from joint to joint, from one end of the stem to the other. These fibrous bands give the column great strength. It is by no means easily broken even when dead and dry. They also, by their elasticity, admit a certain