genus, for it has been in existence on the earth from the epoch of the Potsdam Sandstone to the present. In every formation are some species of *Lingula*; and living species may be found along our Atlantic coast, clinging by their fleshy peduncles to the wharves and other supports. Another remarkable fact about *Lingula* is this: Its shell is composed largely of *bony* substance—phosphate of lime—while the shells of ordinary molluscs are composed of *stony* substance—carbonate of lime; and this peculiarity of constitution has clung to this little type through all the ages.

It is a peculiarity of Brachiopods to have the two valves unequal; one is more convex than the other. The more convex valve has also the more projecting beak. But each is symmetrical taken by itself. That is, if you lay it down on the side, you see the beak in the middle, and on each side of it, the outline of the valve presents the same shape and curve. Now, the clam and river mussel are quite different. In these, the two valves are equally convex; and, if you consider one valve by itself, it is *not* symmetrical. That is, if you lay a valve down on its side, you find the beak nearer one end; and the slope of the shell-outline is *not* the same on each side of the beak. Shells of this sort belong to the class *La-mel'-li-branchs*. All the difference in the forms of these two classes arises from the position of the animal in the shell. In the Lamellibranchs, one valve is on the right side and the other on the left. So the principle of *bilateral symmetry* makes one valve the counterpart of the other. In the Brachiopods, one valve is on the back and the other over the abdomen. So the principle of bilateral symmetry does not operate between the two valves; but the right and left sides of each valve separately are symmetrically developed. By bilateral symmetry we mean the law or principle which causes every feature of the right side of an animal to have a corresponding feature on the left side. This principle runs through the whole animal kingdom. Even among the star-fishes, crinoids, corals or other so-called "radiate" animals, we can draw a line which will separate right and left sides. Try it in a star-fish.