

taching the point to such body, and retracting the foot, this animal drags its shell towards it; and by repeating the operation successively on other points of the fixed object, continues slowly to advance.

This instrument is of great use to such shell-fish as conceal themselves in the mud or sand, which its structure is then peculiarly adapted for scooping out. The *Cardium* continually employs its foot for this purpose: first elongating it, directing its point downwards, and insinuating it deep into the sand; and next, turning up the end, and forming it into a hook, by which, from the resistance of the sand, it is fixed in its position, and then the muscles which usually retract it are thrown into action, and the whole shell is alternately raised and depressed, moving on the foot as on a fulcrum. The effect of these exertions is to drag the shell downwards. When the animal is moderately active these movements are repeated two or three times in a minute. The apparent progress is at first but small; the shell, which was raised on its edge at the middle of the stroke, falling back on its side at the end of it; but when the shell is buried so far as to be supported on its edge, it advances more rapidly, sinking visibly at every stroke, till nothing but the extremity of the tube can be perceived above the sand. Mr. Osler, who has given us this account,\* observes that the instinct, which directs the animal thus to procure a shelter, operates at the earliest period of its existence. The *Mya truncata*, when fully grown, will not attempt to burrow; but on placing two young ones, which were scarcely more than a line in length, and apparently but just excluded, on sand, in a glass of sea-water, he found that they buried themselves immediately.

By a process exactly the inverse of this, that is, by doubling up the foot, and pushing with it downwards against the sand below, the shell may be again made to rise by the same kind of efforts which before protruded the foot. By this process of burrowing, the animal is enabled quickly to retreat

\* Philos. Trans. for 1826, p. 349.