

But the parts of the caterpillar's body which most justly demand our attention, are the *stigmata*, as they are called; or those holes on the sides of its body, through which the animal is supposed to breathe. These holes are easily discoverable all along on each side. They are eighteen in number, nine on a side, rather nearer the belly than the back; a hole for every ring, of which the animal's body is composed, except the second, the third, and the last. These oval openings may be considered as so many mouths, through which the insect breathes; but with this difference, that as we have but one pair of lungs, the caterpillar has no less than eighteen. These lungs appear to be hollow cartilaginous tubes, and of the colour of mother-of-pearl. These tubes are often seen to unite with each other; some are perceived to open into the intestines; and some go to different parts of the surface of the body. That these vessels serve to convey the air, appears evidently, from the well known experiment of Malpighi; who, by stopping up the mouths of the *stigmata* with oil, quickly suffocated the animal, which was seen to die convulsed the instant after. In order to ascertain his theory, he rubbed oil upon other parts of the

insect's