cones in layers of ten pounds each, throwing in four ounces of ſalt with every layer, and covering it with large dry leaves like thoſe of the water-lily, and cloſely flopping the mouth of the veſſels. But in laying the cones into the veſſels, they ſeparate the long, white, and glittering ones, which yield a very fine ſilk, from thoſe that are thick, dark, and of the colour of the ſkin of an onion, which produce a coarſer ſilk.

The ſilk worm is a species of caterpillar, which, like all others of the ſame claſs, undergoes a variety of changes, that, to perſons who are not acquainted with objects of this kind, will appear to be not a little ſurpriſing.

It is produced from a yellowiſh coloured egg, about the ſize of a ſmall pin head, which has been laid by a kind of greyiſh coloured moth, which the vulgar con­found with the butterfly.

Theſe eggs, in the temperature of this climate, if kept beyond the reach of the fire and sun ſhine, may be preserved during the whole of the winter and ſpring months without danger of hatching : and even in ſummer they may eaſily be prevented from hatching if they be kept in a cool place ; but in warmer climates it is ſcarcely poſſible to preſerve them from hatching, even for a few days, or from drying ſo much as to deſtroy them. Hence it is eaſy for a native of Britain to keep the eggs till the food on which the worm is to feed be ready for that purpoſe. When this food is in perfec­tion, the eggs need only be expoſed to the fun for a day or two, when they will be hatched with great facility.

When the animal is firſt protruded from the egg, it is a ſmall black worm, which is active, and naturally aſcends to the top of the heap in ſearch of food. At this stage of his growth the ſilk worm requires to be fed with the youngeſt and moſt tender leaves. On theſe leaves, if good, he will feed very freely for about eight days, during which period he increaſes in ſize to about a quarter of an inch in length. He is then attacked with his first ſickneſs, which conſiſts in a kind of le­thargic ſleep for about three days continuance ; during which time he refuſes to eat, and changes his ſkin, preſerving the ſame bulk. This ſleep being over, he begins to eat again, during five days, at which term he is grown to the ſize of full half an inch in length ; after which follows a ſecond ſickneſs in every reſpect like the former.

He then feeds for other five days ; during which time he will have increaſed to about three quarters of an inch in length, when he is attacked with his third ſickneſs. This being over, he begins to eat again, and continues to do ſo for five days more, when he is attacked by his fourth ſickneſs, at which time he is arrived at his full growth. When he recovers this ſickneſs, he feeds once more during five days with a moſt voracious appetite ; after which he diſdains his food, becomes tranſparent, a little on the yellowiſh caſt, and leaves his ſilky traces on the leaves where he paſſes. Theſe signs denote that he is ready to begin his cocoon, and will eat no more.

Thus it appears that the whole duration of the life of the worm, in this ſtate of its exiſtence, in our climate, is uſually about 46 days ; 28 of which days he takes food, and remains in his ſick or torpid ſtate 18 ; but it is to be obſerved, that during warm weather the periods of ſickneſs are ſhortened, and in cold weather lengthen­ed, above the terms here ſpeciſied. In very hot cli­

mates it may be ſaid to live faſter, and ſooner to attain maturity, than in thoſe that are colder. Dr Anderson informs us, that at Madras the worm undergoes its whole evolutions in the ſpace.of 22 days. It appears, however, that it feeds fully as many days in India as in Europe, the difference being entirely occasioned by ſhortening the period of ſickneſs. The longeſt ſickneſs he had ſeen them experience there did not exceed two days ; and during summer it only laſts a few hours.

When the worm has attained its ſull growth, it ſearches about for a convenient place for forming its co­coon, and mounts upon any branches or twigs that are put in its way for that purpoſe. After about two days ſpent in this manner, it settles in its place, and forms the cocoon, by winding the silk which it draws from its bowels round itſelf into an oblong roundiſh ball.

During this operation it gradually loses the appear­ance of a worm ; its length is much contracted, and its thickneſs augmented. By the time the web is finiſhed, it is found to be transformed into an oblong roundiſh ball, covered with a ſmooth ſhelly ſkin, and appears to be perfectly dead. In this ſtate of exiſtence it is called an *aurelia.* Many animals in this ſtate may be oſtem ſeen ſticking on the walls of out-houſes, ſomewhat resembling a ſmall bean.

In this ſtate it remains for ſeveral days entirely motionleſs in the heart of the cocoon, after which it burſts like an egg hatching, and from that comes forth a heavy dull looking moth with wings ; but theſe wings it never uſes for flying ; it only crawls ſlowly about in the place it has been hatched. This creature forces its way through the ſilk covering which the worm had woven, goes immediately in queſt of its mate, after which the female lays her eggs; and both male and fe­male, without taſting food in this ſtage of their exiſt­ence, die in a very ſhort time.

The silk worm, when at its full ſize, is from an inch and a quarter to an inch and a half in length, and about hall an inch in circumference. He is either of a milk or pearl colour, or blackiſh ; theſe laſt are eſteem­ed the beſt. His body is divided into ſeven rings, to each of which are joined two very ſhort feet. He has a ſmall point like a thorn exactly above the anus. The ſubſtance which forms the silk is in his ſtomach, which is very long, wound up, as it were, upon two ſpindles, as ſome ſay, and ſurrounded with a gum, commonly yel­lowiſh, ſometimcs white, but ſeldom greeniſh. When the worm ſpins his cocoon, he winds off a thread from each of his ſpindles, and joins them afterwards by means of two hooks which are placed in his mouth, ſo that the cocoon is formed of a double thread. Having opened a ſilk worm, you may take out the ſpindles, which are folded up in three plaits, and, on ſtretching them out, and drawing each extremity, you may extend them to near two ells in length. If you then ſcrape the thread ſo ſtretched out with your nail, you ſcrape off the gum, which is very like bees wax, and performs the same office to the ſilk it covers as gold leaf does to the ingot of ſilver it ſurrounds, when drawn out by the wire drawer. This thread, which is extremely ſtrong and even, is about the thickneſs of a middling pin.

Of ſilk worms, as of moſt other animals, there is a conſiderable variety of breeds, ſome of which are much more hardy, and poſſeſs qualities conſiderably different from others. This is a particular of much importance